FROM KNOWLEDGE TO ACTION: QUALITY PARTICIPATION AND COACHING EFFECTIVENESS IN DISABILITY SPORT

by

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Abstract

Limited research attends to the quality of participation in sport for persons with disabilities (i.e., disability sport), or the role of coaches in shaping the quality of athletes’ disability sport experiences. To address these knowledge gaps, this dissertation examined quality participation and coaching effectiveness in disability sport. Guided by the Knowledge to Action framework, the knowledge created in Manuscripts 1-3 contributed to the development of a learning tool for disability sport coaches in Manuscript 4.

Manuscript 1 (Chapter 3) explored the meanings that athletes with physical disabilities attribute to their participation in disability sport over time. Two-part life history interviews were conducted with 21 athletes with a physical disability and narratively analyzed. Five distinct narrative types were identified, representing differential developmental trajectories and meanings of participation in disability sport.

Manuscript 2 (Chapter 4) examined athletes’ perceptions of effective disability sport coaching throughout development. A subset of the data collected for Manuscript 1 focused on athletes’ experiences with disability sport coaches. These data were separated and thematically analyzed. Two overarching themes reflected patterns in coaches’ knowledge, beliefs, and behaviours related to (a) positive and negative experiences in disability sport, and (b) the context.

Manuscript 3 (Chapter 5) investigated how effective (i.e., model) disability sport coaches shape successful programs for athletes with disabilities. A collective case study of six disability sport programs was performed, including document review, mobile interviews, and semi-structured interviews with coaches and athletes. Cases were independently analyzed and compared. The beliefs and vision of each coach corresponded to the implementation of core values that translated into quality experiences for athletes across four layered themes.
Manuscript 4 (Chapter 6) produced an evidence-informed learning tool for disability sport coaches. The findings of Manuscripts 1-3 were synthesized alongside other relevant sources of knowledge to identify target behaviours and behavioural determinants. Following stakeholder review, an ethnographic creative nonfiction was crafted to demonstrate and provide information about coach behaviours that facilitate quality experiences for athletes with a disability.

Overall, this dissertation contributes toward deepening our understanding of athlete development, quality participation, and coaching effectiveness in disability sport. These findings may be used by researchers and practitioners to create, deliver, and promote quality programs for athletes with a disability.
Co-Authorship

The manuscripts presented in this dissertation are the work of Veronica Allan. The co-authors of the manuscripts are Dr. Jean Côté (Chapters 3-6), Dr. Amy Latimer-Cheung (Chapters 3-6), Dr. Kathleen Martin Ginis (Chapters 3 and 5), Dr. Brett Smith (Chapter 3), Dr. Blair Evans (Chapter 4), Dr. Heather Gainforth (Chapter 6), and Dr. Jennifer Turnnidge (Chapter 6). The contributions of Ms. Allan and each of the co-authors are outlined below for each manuscript.

Chapter 3: Narratives of Participation among Individuals with Physical Disabilities: A Life-course Analysis of Athletes’ Experiences and Development in Disability Sport

This manuscript has been published in Psychology of Sport and Exercise. Ms. Allan was responsible for refining the research question and study design, adapting the demographic questionnaire and interview guide, recruiting participants and conducting interviews, analyzing the data, and writing up the manuscript. Dr. Smith provided guidance throughout data analysis and interpretation of the results. Dr. Côté provided input regarding study design and interpretation of the results. Drs. Martin Ginis and Latimer-Cheung were responsible for developing the original research question and study design, as well as providing input on the interpretation of results. All co-authors provided editorial feedback on the manuscript.

Chapter 4: Athletes’ Perceptions of Effective Disability Sport Coaching Across Development

This manuscript is currently under review at the Journal of Applied Sport Psychology. In this manuscript, a subset of the data collected in Chapter 3 was independently analyzed and the results are presented. As such, Ms. Allan was responsible for developing the research question and study design, adapting the interview guide, analyzing the data, and writing up the
manuscript. Dr. Evans assisted in developing the research question and study design, as well as adapting the interview guide. He also provided input on the interpretation of results. Dr. Côté assisted in developing the research question and study design, and providing input on the interpretation of results. Dr. Latimer-Chung provided input on the interpretation of results. All co-authors provided editorial feedback on the manuscript.

Chapter 5: Fostering Quality Disability Sport Programs: A Collective Case Study of Model Coaches in Disability Sport

This manuscript is currently in preparation for submission to *Qualitative Research in Sport, Exercise, and Health*. Ms. Allan was responsible for conceptualizing the research question and study design, developing all research tools (i.e., coach nomination and evaluation forms, interview protocols and guides), recruiting participants, collecting the data, analyzing the data, and writing up the manuscript. Dr. Côté assisted in developing the research question and study design, provided input on all research tools, and acted as a sounding board during data analysis. Dr. Latimer-Cheung provided input on the study design and interpretation of the findings. All co-authors provided editorial feedback on the manuscript.

Chapter 6: Narrative as a Learning Tool for Coaches of Athletes with a Disability: Using Stories to Translate Research into Practice

This manuscript is currently in preparation for submission to *Physical Education and Sport Pedagogy*. Ms. Allan was responsible for conceptualizing the research question and study design, performing the systematic search and review, training research assistants to assist extract data, coding all data, and crafting an ethnographic creative nonfiction based on these findings.
and feedback from stakeholders. Subsequently, she was responsible for writing up the manuscript. Dr. Gainforth provided methodological guidance, input on the features selected for inclusion in the ethnographic creative nonfiction, and feedback on all drafts of the ethnographic creative nonfiction. Dr. Turnnidge provided theoretical expertise, input on the features selected for inclusion in the ethnographic creative nonfiction, and feedback on all drafts of the ethnographic creative nonfiction. Drs. Côté and Latimer-Cheung provided input on the research question and feedback on all drafts of the ethnographic creative nonfiction. All co-authors provided editorial feedback on the manuscript.
Acknowledgements

And some lessons learned along the way…

I saved this section for last. Why? Not because I wanted to procrastinate. No, because the task ahead of me felt so overwhelming that I wasn’t sure how to express my gratitude for nearly a decade of teaching, mentorship, supervision, support, and friendship in merely a few short pages. In fact, the more I thought about it (and failed to ‘put pen to paper’), the more I realized that my appreciation extended beyond simply having good people in my life. I am also incredibly thankful for the lessons that each person taught me along the way. And while I recognize that more people have contributed to this dissertation – as well as my personal and professional development – than I could possible thank to the extent deserved, I would like to take this opportunity to acknowledge those individuals who played a particularly important role.

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List of Abbreviations

CRPD: Convention on the Rights of Persons with Disabilities

ICF: International Classification of Functioning, Disability, and Health

KTA: Knowledge to Action Framework

UK: United Kingdom

US: United States

WHO: World Health Organization
Chapter 1

Introduction

1.1 Essential Background Information

In 2006, the United Nations endorsed the Convention on the Rights of Persons with Disabilities. This landmark convention protects the right to “full and effective participation and inclusion in society” (United Nations, 2006, p. 8), which includes access to mainstream and disability-specific recreational and sporting activities, venues, and services. Despite offering an array of potential physical, psychological, and social benefits (e.g., Blinde & McClung, 1997; Heath & Fentem, 1997; Martin, 2006; Slater & Meade, 2004), rates of sport participation among individuals with disabilities are much lower than rates within the able-bodied population (e.g., U.S. Department of Health and Human Services, 2011; Martin Ginis et al., 2010; Sport England, 2017). Efforts to promote sport participation among persons with a disability are vital not only for the potential benefits, but also as a means of enacting social justice (Schinke, Stambulova, Lidor, Papaioannou, & Ryba, 2016; Smith, Bundon, & Best, 2016). Thus, further examination into the concept of participation, as well as strategies for promoting participation, are warranted in the context of sport for persons with disabilities (i.e., disability sport).

According to the World Health Organization (WHO; 2001), participation is defined as an individual’s involvement in life situations. Notably, several researchers have expanded this definition to consider both the quantity and quality of an individual’s participation (Hammel et al., 2008; Martin Ginis, Evans, Mortenson & Noreau, 2017). A
large body of research exists to examine factors influencing the quantity of sport participation among persons with disabilities (e.g., barriers; Martin Ginis, Ma, Latimer-Cheung, & Rimmer, 2016); however, a fundamental next step to ensuring full and effective participation involves the facilitation of quality sport experiences throughout one’s development. Efforts to understand the sport and physical activity experiences of individuals with disabilities have emerged in recent years (e.g., Turnnidge, Vierimaa, & Côté, 2012; Shirazipour et al., 2017), culminating in the development of the Quality Parasport Participation Framework (Evans et al., 2018).

Developed through a synthesis of existing literature and input from stakeholders, the Quality Parasport Participation Framework centers on the concept of quality participation – an athletes’ broad subjective evaluation that his or her sport involvement is satisfying, enjoyable, and generates personally-valued outcomes (Evans et al., 2018). Quality participation occurs as the result of repeated exposure to quality experiences in disability sport, which refer to an athletes’ ongoing appraisals of whether or not those experiences satisfy a range of task and/or social needs (i.e., autonomy, belongingness, challenge, engagement, mastery, and meaning; see Martin Ginis et al., 2017). The framework also specifies 25 conditions that act as precursors to quality disability sport experiences, and subsequently, quality participation. While several of these conditions are necessary for participation to occur (e.g., accessibility of the environment), others

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1 In the Quality Parasport Participation Framework, the term ‘parasport’ is used to broadly represent all sport for participants with a disability, including an intellectual, cognitive, physical, or sensory disability (Evans et al., 2018). In contrast, the term ‘disability sport’ is used in this dissertation to reflect sport for persons with disabilities that are represented within this work (i.e., persons with physical, cognitive, and visual impairments).
explicitly enhance the quality of athletes’ participation in disability sport. Of particular note, coaches are identified as key social agents in the disability sport environment (see Martin & Whelan, 2014 for a review). Five of the conditions specified by Evans and colleagues (2018) apply directly to the characteristics and behaviours of disability sport coaches, although coaches may indirectly influence several others (e.g., the group environment, sport-related attitudes).

While there is a growing body of literature focused on coaches of athletes with a disability, examinations of coaches in disability sport remain limited relative to coaches in mainstream sport settings (e.g., Gilbert & Trudel, 2004; Martin & Whelan, 2014). Coaches of athletes with a disability employ many of the same skills as coaches of able-bodied athletes, in addition to those roles and responsibilities that are specific to disability sport (e.g., ensuring that facilities are accessible; Cregan, Bloom, & Reid, 2007). Furthermore, social and cultural understandings of disability are likely to influence how coaches think about disability and apply it to their coaching practice (Townsend, Smith, & Cushion, 2016). As such, there is a general need for research examining the roles and influence of coaches on the development of athletes in the unique context of disability sport.

Grounded in the extensive able-bodied sport literature, coaching effectiveness is defined as “the consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes’ competence, confidence, connection, and character in specific coaching contexts” (Côté & Gilbert, 2009, p. 316). This definition broadly encompasses the interaction of three necessary components: (a) coaches’ knowledge and behaviours, (b) athletes’ experiences and outcomes, and (c) the context.
Among the literature focused on disability sport coaches, perhaps the most notable foci include coaches’ knowledge, learning, and development (see Duarte, Culver, Trudel, & Milistedt, 2018 for a review). In contrast, few studies have explicitly linked coaches’ knowledge and behaviours to athletes’ experiences or outcomes in disability sport (e.g., Turnnidge et al., 2012). While there is a general need for research focused on disability sport coaches, there is also a more specific need to explore how coaches create quality experiences for athletes with a disability (Martin & Whelan, 2014). In doing so, we may work towards a more nuanced understanding of coaching effectiveness in the disability sport context.

Finally, despite recent growth in research examining coaches of athletes with a disability, very little knowledge has been translated into evidence-informed interventions that serve to develop disability sport coaches’ knowledge and practice. Only one intervention targeting disability sport coaches has been published in the academic literature, in which the effects of a workshop designed to teach autonomy-supportive behaviours were evaluated (Cheon, Reeve, Lee, & Lee, 2015). Athletes of coaches who participated in the workshop reported higher levels of motivation and won more Paralympic medals than athletes of coaches in the control group, demonstrating that coach training can have a positive effect on athletes’ outcomes. Considering the potential for disability sport coaches to create positive environments and experiences for athletes with a disability, there is an urgent need for knowledge translation efforts in order to address the gap between research and practice in the context of disability sport coaching.

1.2 Guiding Framework and Objectives

Based on a comprehensive review of the knowledge translation literature, the
Knowledge to Action (KTA) framework outlines processes for creating and applying knowledge in real-world settings (Graham et al., 2006). The KTA framework is built around two main processes: knowledge creation, which involves the refinement of primary studies into knowledge tools or products through the process of aggregating or synthesizing existing knowledge, and the action cycle, which is the process that leads to the implementation or application of knowledge. Taken together, KTA best reflects the definition of ‘knowledge exchange’ put forward by the Canadian Health Services Research Foundation: A collaborative problem-solving between researchers and knowledge users that involves interaction and results in mutual learning through the process of planning, producing, disseminating, and applying research.

This dissertation was framed within the process of knowledge creation, which includes three phases (also known as the ‘knowledge funnel’). The knowledge inquiry phase represents all primary studies or first-generation knowledge on a particular topic. In order to refine these primary studies, the knowledge synthesis phase involves the aggregation of first-generation knowledge – for example, through systematic reviews or meta-analyses – to identify relevant information for inclusion in a specific tool or product. The final phase involves the development of tools or products intended to present knowledge in clear, concise, and user-friendly formats. Throughout this process, first-generation knowledge is sifted and refined into a format that is suitable for eventual dissemination to knowledge users.

Aligning with the knowledge funnel in the KTA framework, the overarching purpose of this dissertation is to explore and enhance participation in disability sport by understanding and optimizing the role of the coach across developmental contexts. As
such, the objectives of this dissertation are three-fold: (a) to explore the meanings attributed to disability sport participation among persons with disabilities over time, (b) to examine the role of coaches in shaping athletes’ disability sport participation across development, and (c) to create an evidence-informed learning tool for disability sport coaches that aims to promote quality disability sport participation. The purpose and objectives of this dissertation are fulfilled through four studies. Manuscript 1-3 fall within the knowledge inquiry phase of the knowledge funnel, and collectively achieve the first two objectives. Manuscript 1 explored the meanings that athletes with physical disabilities attribute to their participation in disability sport over time, while Manuscripts 2 and 3 broadly examined how coaches shape quality experiences for athletes with disabilities. To achieve the third objective, Manuscript 4 involved the knowledge synthesis and product development phases of the knowledge funnel. By synthesizing the data obtained in Manuscripts 1-3 alongside other relevant sources of knowledge, Manuscript 4 presents the development of an evidence-informed learning tool for disability sport coaches.

1.3 Overview of the Dissertation

This dissertation consists of a literature review, four studies, and a general discussion. The literature review provides a comprehensive and critical description of current literature on the topics of participation and coaching in disability sport, including models of disability and a discussion of researcher positionality. Subsequently, the four studies (described above) are presented in manuscript format. To conclude, the general discussion presents an integrated summary of key findings from the dissertation,
including relevant theoretical, methodological, and practical implications. Strengths, limitations, and future directions are also discussed.
1.4 References


Chapter 2

Literature Review

This chapter presents a comprehensive exploration of literature regarding sport participation for persons with disabilities, as well as coaching in disability sport contexts. The chapter is divided into eight sections. The first section (2.1) introduces Knowledge to Action (KTA) as the guiding framework for this dissertation. Subsequently, Section 2.2 describes models of disability, and defines the approach taken to situate the research presented in this dissertation. The third section (2.3) outlines models of social participation for persons with disabilities, thus providing the necessary context for an examination of sport participation among persons with disabilities. Sections 2.4 and 2.5 synthesize existing literature that focuses on sport participation for individuals with disabilities. Coaches are identified as a key social agent influencing the quality of sport participation among persons with disabilities, and thus, research focused on coaches of athletes with disabilities is presented in Section 2.6. An additional section (2.7) discusses the need for knowledge translation in order to optimize the role(s) of coaches in sport for persons with disabilities. The chapter concludes with a summary, which highlights the objectives and approaches used to guide this dissertation (Section 2.8).

2.1 Guiding Framework: Knowledge to Action

The overarching purpose of this dissertation is to explore and enhance participation in disability sport by understanding and optimizing the role of the coach across developmental contexts. To achieve this objective, the four studies that comprise this dissertation are couched within the KTA framework. Based on a comprehensive review of the knowledge translation literature, the KTA framework outlines processes for
creating and applying knowledge in real-world settings (Graham et al., 2006). KTA is built around two main processes: knowledge creation, which involves the refinement of primary studies into knowledge tools or products through the process of aggregating or synthesizing existing knowledge, and the action cycle, which is the process that leads to the implementation or application of knowledge. This dissertation was framed within the process of knowledge creation, which includes three phases (also known as the ‘knowledge funnel’). The knowledge inquiry phase represents all primary studies or first-generation knowledge on a particular topic, which includes the knowledge presented in Manuscripts 1-3. In order to refine these primary studies, the knowledge synthesis phase involves the aggregation of first-generation knowledge to identify relevant information for inclusion in a specific tool or product. The final phase involves the development of tools or products intended to present knowledge in clear, concise, and user-friendly formats. Manuscript 4 encompasses the knowledge synthesis and knowledge product development phases, in which first-generation knowledge obtained from Manuscripts 1-3, as well as other relevant sources of literature, are synthesized and used to develop a learning tool for disability sport coaches. In the following sections, the models and literature that inform the specific objectives of each manuscript are described in detail.

2.2 Models of Disability

Before delving into the literature on participation and coaching in disability sport, we must first consider the varied approaches that frame social and cultural understandings of disability. Several different conceptual models of disability exist in the literature. As researchers, when we think about disability, the theoretical model we choose influences our assumptions, approach, and the tools we use to conduct our
research (DePauw, 2000). The models of disability also underpin dominant forms of discourse that influence our capacity to translate knowledge into practice (e.g., in coaching; Townsend, Smith, & Cushion, 2016; in the media; Silva & Howe, 2012). By reviewing the dominant models of disability and highlighting the strengths and limitations of each one, this section highlights the scope and approach to disability taken in this dissertation. The following models of disability are reviewed: the medical model, the social model, the biopsychosocial model, the social-relational model, and the human rights model.

**The medical model.** Throughout the 20th Century and continuing to the present day, there has been a gradual and evolving shift in the way disability is viewed and approached by society (Legg & Steadward, 2011; Oliver, 1990). The earliest approach, the medical model, focused heavily on the individual as the source of impairment; a person was disabled by a limitation with his or her body (Oliver, 1990). Within this model, disability is viewed as an individual problem or personal tragedy that needs to be rectified or overcome (Goodley, 2016). In this case, the “problem” with the body (i.e., impairment) is thought the be “fixed” through medical intervention (Marks, 1997). However, the person with a disability is not necessarily expected to participate in their own care. By limiting their voice and involvement, the medical perspective risks dehumanizing individuals with a disability (Haegele & Hodge, 2016; Swarbrick, 2006). Such an approach may have negative psychosocial implications for persons with a disability, which may affect mental health and the ability to recover from a traumatic injury (Swarbrick, 2006). The medical model has also been criticized for persisting negative perceptions of disability (Haegele & Hodge, 2016) and failing to consider the
various external factors that limit one’s ability to participate in society (Oliver, 1990).

**The social model.** Increasing awareness of the barriers faced by individuals with a disability in a world designed primarily for able-bodied beings has led to a paradigmatic shift, such that people are no longer viewed as being disabled by their bodies, but rather by the structure of modern society (Barton, 2006; Oliver, 1990). The social model of disability, also known as social oppression theory, rests on the distinction between biological impairment and socially imposed disabilities (Barnes, 2007; Oliver, 1990). Organizations such as the Union of the Physically Impaired Against Segregation (1976) and Disabled Peoples’ International (1986) were some of the first disability activists to distinguish between these concepts, defining *impairment* as a functional limitation of the individual and *disability* as the loss or restriction of opportunities to participate in mainstream social activities on an equal level with others due to physical or social barriers. That being said, critics of the social model argue that disability cannot solely be the result of societal structures. By separating impairment from disability, some researchers suggest that the model does not fully account for the lived experiences of persons with disabilities (Palmer & Harley, 2012). Furthermore, the model does not account for differences between individuals with disabilities (Haegele & Hodge, 2016). While the shift toward a social model highlights the socially constructed and institutionalized nature of disability, there remains a need to recognize the multitude of internal and external factors that shape how we understand disability.

**The biopsychosocial model.** The World Health Organization (WHO) promotes a balanced approach to the medical and social models of disability. Accordingly, the International Classification of Functioning, Disability, and Health (ICF) describes
disability as a dynamic interaction between health conditions and contextual factors, both personal and environmental (WHO, 2001). This view reflects a biopsychosocial model of disability, in which disabilities are considered to be the result of interactions between an individual and a variety of biological, psychological, and social factors – thus addressing the constraints of both the medical and social models (WHO, 2001, 2011). Within the ICF, disability and functioning occur at three levels: body functions and structures, activities, and participation. First, body functions and structures refer to functioning at the level of the body or body part. At the next level, the ability to execute an activity or task indicates the functional capacity of an individual. Finally, participation signifies the lived experience of a person in their surrounding environment, assessed in terms of ability to perform relevant activities or tasks.

While the balanced perspective of the biopsychosocial model, as exemplified through the ICF, represents significant progress in terms of understanding and integrating the complex contextual factors that influence contemporary views of disability, several concerns have been raised within disability organizations and the scientific community (Lundälv, Törnbom, Larsson, & Sunnerhagen, 2015; Mpofu & Oakland, 2010). Stemming from critiques of the medical model, the biopsychosocial model risks the continued medicalization and dehumanization of persons with disabilities by objectifying and potentially marginalizing individuals according to a classification system that largely emphasizes the medical implications of impairment over the social ones (Lundälv et al., 2015; Mpofu & Oakland, 2010). In other words, the biopsychosocial model separates the individual from the environment and promotes objective or performance-based understandings of disability, thus minimizing the importance of subjective and lived
experience (Hammel et al., 2008).

The social-relational model. Moving away from binary understandings of disability, critical disability theory emerged as an extension and, to some degree, “productive critique” of the social model of disability (Shildrick, 2007). Within critical disability theory, disability is considered not only in social, economic, and political terms, but also in terms of psychology, culture, and discourse (Meekosha & Shuttleworth, 2009). By offering a more complex conceptual understanding of people with disabilities as a socially oppressed population, emancipation and social justice arise as key outcomes of critical disability research. Couched within critical disability theory, the social-relational model of disability accounts for both internalized (e.g., feeling worthless or ‘lesser than’) and externalized (e.g., inability to access a building) forms of oppression against persons with disabilities (Thomas, 1999). More specifically, the social-relational model recognizes disability as the result of social disadvantages or restrictions on participation, while subverting criticism of the social model by acknowledging the biological or physiological aspect of impairment, as well as the psycho-emotional dimension of disability (Reeve, 2004). As such, the social-relational model pays tribute to the complexity of the disability construct by challenging the ableist assumptions that shape society and emphasizing the subjective experiences of individuals who live with impairment (Meekosha & Shuttleworth, 2009; Smith & Perrier, 2013).

Although the social-relational model largely addresses the limitations of the medical, social, and biopsychosocial models, weaknesses include a lack of clarity with respect to the relationship between the model and theory from which it was established (i.e., critical disability theory) and a general tendency to use academic language that is
inaccessible to the general population of persons with disabilities (Berghs, Atkin, Graham, Hatton, & Thomas, 2016). Nonetheless, the social-relational model has been widely promoted for use in the fields of sport, exercise, and health psychology (Smith & Perrier, 2013; Townsend et al., 2016).

The human rights model. The human rights model of disability was initially linked to the 1948 Declaration of Human Rights, but is most commonly associated with the United Nations Convention on the Rights of Persons with Disabilities (CRPD). The CRPD is conceptually linked to the ICF; however, it promotes a dynamic understanding of disability by “recognizing that disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others” (United Nations, 2006, p. 2). The human rights model aligns closely with the social-relational model of disability by promoting an understanding of the various social and economic processes that shape disability (Quinn et al., 2002; Rioux, 2011). Underpinned by activist ideology, the human rights model locates the problem outside of the person (Quinn et al., 2002). As such: “The debate about the rights of the disabled is therefore connected to a larger debate about the place of difference in society” (Quinn et al., 2002, p. 1). Criticism of the human rights model largely revolves around the non-enforcement of the CRPD, which is linked to vague terminology (e.g., “reasonable accommodation”) thus hindering its implementation (Berghs et al., 2016).

Provided that sport is recognized as a fundamental human right within the CRPD, the human rights model represents an important perspective for consideration when examining the concept of sport participation for persons with disabilities. Considering its
alignment with a social-relational model of disability, and the capacity for both models to address the limitations of the medical, social, and biopsychosocial models of disability, the approach to disability assumed within this dissertation is informed through the lens of both the social-relational and human rights models. Through this lens, the work presented in this dissertation puts a spotlight on the subjective or lived experiences of persons with disabilities and endeavours to progress the field toward social justice in the sport domain through an enhanced understanding of participation, and the role of coach in optimizing participation, in disability sport.

2.3 Models of Participation

As previously noted, the CRPD endorses the right to “full and effective participation and inclusion in society” (United Nations, 2006, p. 8). However, what it means to participate fully and effectively has been debated in the literature. For example, Imms and colleagues (2016) define the participation construct using two dimensions: attendance (i.e., the quantity of participation) and involvement (i.e., the quality of participation). Attendance is defined as ‘being there’ and is measured according to the frequency and duration of attendance and/or the range of available activities. Alternatively, involvement refers to the experience of participation while attending, and includes aspects such as enjoyment, motivation, and social connection. Involvement is embedded within the attendance dimension such that ‘being there’ is required in order for involvement to occur. That being said, Imms and colleagues (2016) note that the relationship between participation quantity and quality is not fully understood. While quantity is well-established within the participation literature (e.g., participation rates, barriers to participation), what we know about quality is less certain. As such, further
examination into what constitutes quality participation is necessary. Provided that the first objective of this dissertation is to explore meanings of participation among athletes with disabilities, an overview of extant definitions and models of participation, divided based on the dimensions of quantity and quality, is provided below.

**Quantity of participation.** As defined by Imms and colleagues (2016), quantity of participation refers to the overall volume of participation (e.g., frequency and duration). Participation quantity is often measured in terms of participation rates, which encompass the total number of individuals who participate in an activity (e.g., sport participation rates; described in detail in Section 2.4). A prominent example of a framework that aligns with the quantity dimension of participation is the ICF. According to the ICF, participation is defined as “involvement in a life situation” (WHO, 2001, p. 10). In this definition, the term “involvement” does not refer to the subjective experience of participation. Rather, participation is assessed in terms of one’s ability to perform roles and activities in relation to relevant social and cultural norms (WHO, 2001). From a social-relational and human rights perspective, this framework has several limitations. In terms of practical assessment, individuals are evaluated on their ability to perform roles and activity in isolation from their environment, thus neglecting critical aspects of what it means to have a disability (i.e., acknowledging impairment in the context of broader social constraints; Cott, 2005). Understandings of how individuals with disabilities experience participation are further limited by the ICF’s failure to account for personal autonomy (i.e., free will; Cardol, de Jong, & Ward, 2002) and methods of participation that conform to alternative social structures (e.g., community integration; Dijkers, 1998). Notably, subjective experience underpins the social-relational and human rights models
of disability; therefore, the quality dimension is considered an essential component of participation in this dissertation.

**Quality of participation.** Several researchers have attempted to tease out the specific characteristics or attributes that define the subjective or experiential aspects of participation (i.e., quality participation). As previously stated, Imms and colleagues (2016) define “involvement” as an extension of attendance that encompasses elements such as engagement, motivation, persistence, social connection, and affect. Alternatively, Kramer and colleagues (2012) describe levels of participation as “the extent to which they [youth with disabilities] felt meaningfully engaged and authentically included” (p. 771), represented along a continuum from *doing something different*, to *waiting or watching*, *fringe participation*, and finally, *doing what everyone else is doing*. Often, subjective dimensions of participation are centered on notions of social belonging, inclusion or acceptance, and extend to feeling like an equal or valued member of society (e.g., Dijkers, 2010; Hammel, 2015; Hammel et al., 2008; Hjelle & Vik, 2011; Heinemann et al., 2011). Other psychological constructs have also been considered as core features of full or meaningful participation, including choice and control, focus or concentration, challenge, mastery, or more broadly, motivation (e.g., Dijkers, 2010; Hammel, 2015; Law, 2002; Maxwell, Augustine, & Granlund, 2012).

Grounded in the views of individuals with diverse disabilities across multiple contexts, Hammel and colleagues (2008) examined the meanings and indicators of participation through focus groups. In doing so, they provide a particularly succinct yet comprehensive conceptualization of what is termed “full participation.” Accordingly, full participation encompasses the following cluster of values: (a) active and meaningful
engagement, (b) choice and control, (c) access and opportunity, (d) personal and societal responsibilities, (e) having an impact and supporting others, and (f) social connection, inclusion, and membership. Of note, access and opportunity is understood by some to reflect a condition necessary for participation to occur, rather than a distinct aspect of quality participation (Martin Ginis, Evans, Mortenson, & Noreau, 2017). This value aligns with the attendance (i.e., quantity) dimension of Imms and colleagues’ (2016) work, which is considered to be a necessary antecedent of involvement (i.e., quality). In addition to these values, participants discussed the importance of being treated with respect and dignity – which was considered an overarching meta-theme of participation. Furthermore, the participants in this study highlighted the need for freedom with respect to defining and pursuing participation on their own terms, as opposed to conforming to predetermined societal norms (Hammel et al., 2008).

Considering the lack of a commonly accepted conceptualization of quality participation, Martin Ginis and colleagues (2017) recently made recommendations for the operationalization and conceptualization of participation based on a configurative review of the participation literature. This review included 10 articles, including the work of Hammel and colleagues (2008), which primarily reflected the occupational therapy literature. Across these articles, the authors identified six common elements that contribute to a quality participation experience: autonomy – having independence, choice or control; belongingness – a sense of belonging or acceptance in a group; challenge – feeling appropriately tested or challenged; engagement – feeling engaged, focused, and motivated; mastery – experiencing achievement, competence, and self-confidence; and meaning – contributing towards obtaining a personal or socially-meaningful goal. The
review also reinforced considerations for participation that are commonly emphasized within the literature (e.g., it is a multidimensional construct, specific to the individual, and encompasses both personal and societal perceptions; Hammel et al., 2008; Heinemann et al., 2013). In contrast, the conceptualization of participation by Martin and colleagues (2017) does not account for the quantity dimension (e.g., attendance, Imms et al., 2016; access and opportunity, Hammel et al., 2008), and instead focuses solely on the elements considered to enhance the subjective component of participation experiences.

While the dominant conceptualization of participation promoted within the ICF fails to account for the subjective or experiential aspects of one’s participation, conceptualizations of participation that do account for subjective experiences are burdened by inconsistent terminology and the lack of a commonly accepted framework (Hammel, 2015; Martin Ginis et al., 2017). By reviewing the disability participation literature and identifying common characteristics associated with experiential aspects of participation, Martin Ginis and colleagues (2017) made great strides in moving towards a comprehensive operationalization of participation. However, this review and the majority of participation research focuses more broadly on community or social participation among people with disabilities. Until recently, the current body of literature lacked a comprehensive examination of quality participation in the sport context (see Evans et al., 2018). Informing this work, the purpose of Manuscript 1 was to explore the meanings that current and former athletes with physical disabilities attribute to their participation in disability sport over time. To provide necessary context for this investigation, and justify the importance of this dissertation more broadly, the following section provides an overview of sport participation among persons with disabilities. Subsequently, research
examining quality participation in sport for persons with disabilities is synthesized.

2.4 Sport Participation among Persons with a Disability

The field of sport psychology lacks a standard, internationally accepted term for sport for persons with a disability (Evans et al., 2018). In this dissertation, the term disability sport is used to represent sport for persons with physical, cognitive, and visual impairments. That being said, individuals with physical impairments were predominantly featured across the four dissertation manuscripts. Correspondingly, physical impairments are the most widely represented category of impairment in Paralympic sport. To demonstrate, the International Paralympic Committee (2015) recognizes 10 categories of impairment, including visual impairments, intellectual impairments, and eight different types of physical impairments. These trends are also reflected in the prevalence of impairment more broadly. For example, more than half of Canadians with disabilities report impairments to mobility (Arim, 2015). To set the stage for further exploration into the concept of quality participation in disability sport, rates of sport participation among individuals with disabilities are described below, including a brief overview of the associated barriers and facilitators, as well as benefits.

Sport participation rates. According to current data, the vast majority of people with disabilities are not enjoying their United Nations-protected right to full and effective participation in sport. Sport participation rates among individuals with disabilities across Canada, the United Kingdom, and the United States are much lower than rates within the able-bodied population (e.g., U.S. Department of Health and Human Services, 2011; Martin Ginis et al., 2010; Sport England, 2017). The latest and most comprehensive data on sport participation rates among persons with disabilities is available through the
Active Lives Survey administered by Sport England (see Sport England, 2017). According to these data, as many as 51% of individuals with impairments are inactive compared to 21% of the able-bodied population. In terms of sport-specific participation, 18% of persons with a limiting illness or impairment participated in sport at least twice in the month preceding completion of the survey, while more than twice as many able-bodied individuals (39%) participated at a comparable rate. Interestingly, preliminary research examining the developmental trajectories of wheelchair basketball players indicates that sex (i.e., male vs. female) and disability type (i.e., congenital vs. acquired) predict onset of sport participation (Dehgansai, Lemez, Wattie, & Baker, 2017b). In particular, female athletes with congenital disabilities and male athletes with acquired disabilities began practicing the sport earlier than their counterparts (Dehgansai et al., 2017b). Nonetheless, while we have an established understanding that the quantity of sport participation among persons with disabilities lags behind that of the able-bodied population, knowledge regarding the developmental trajectories and quality of sport participation warrants continued exploration, and represents a potentially fruitful avenue for increasing the quantity of participation (e.g., Martin, 2006).

**Barriers and facilitators to sport participation.** Low rates of sport participation among people with disabilities are unsurprising considering the potential barriers faced by many of these individuals. For example, Martin Ginis, Ma, Latimer-Cheung, and Rimmer (2016) conducted a systematic review of review articles that address barriers and facilitators to physical activity participation, such as sport, among children and adults with physical disabilities. Barriers and facilitators to participation across the 22 review articles were grouped into five levels: intrapersonal (e.g., negative affect and emotion),
interpersonal (e.g., social support), institutional (e.g., disability-specific knowledge among staff within organizations), community (e.g., availability of equipment), and policy (e.g., availability of transportation services). Research and reviews examining the factors that influence physical activity participation among individuals with disabilities more generally (e.g., Rimmer, Riley, Wang, Rauworth, & Jurkowski, 2004; Rimmer & Rowland, 2008), and focused on the factors that influence sport-specific participation (e.g., Jaarsma, Dijkstra, Geertzen, & Dekker, 2014), reinforce these findings. Needless to say, the call to address these barriers (and thus increase the quantity of participation) is well documented and resoundingly clear. While the barriers and facilitators to sport participation have long been recognized, the factors that shape the quality of sport participation are less well understood.

**Benefits of sport participation.** Enhancing both the quantity and quality of sport participation among persons with disabilities is important for several reasons. Most notably, participation in physical activity, such as sport, has been linked to a range of potential benefits for persons with disabilities (Dehghansai, Lemez, Wattie, & Baker, 2017a; Lai, Young, Bickel, Motl, & Rimmer, 2017; Lai et al., 2018). For example, Lai and colleagues (2017) conducted a synthesis of physical activity and exercise intervention literature for people with physical and cognitive impairments and found that 83% of studies included in the review reported significant health outcomes. More specifically, between 70% and 89% of studies examining the following outcomes, listed in order of increasing proportion, reported significant positive effects: mental health (e.g., anxiety, depression), musculoskeletal (e.g., strength, endurance), functional (e.g., walking ability, quality of life), and cardiorespiratory (e.g., cardiorespiratory fitness). Although
there is strong evidence to support the short-term effects of physical activity, the sustainability of these effects is less clear. Another review by Lai and colleagues (2018) examined the sustainability of health and physical activity outcomes (i.e., functional, musculoskeletal, cardiorespiratory, metabolic, and mental health) following exercise trials for individuals with a disability; while 86% of studies reported at least one health outcome that was significant at follow-up, only 32% of all measured outcomes showed significant changes across the studies. Notably, behaviour change strategies were linked to significant intervention effects (Lai et al., 2018). However, more research is needed to examine the long-terms effects of physical activity participation and optimize the sustainability of physical activity interventions.

Beyond health-related outcomes, qualitative research has also provided important insight into the psychosocial benefits of sport participation for individuals with disabilities. For example, sport participation has been discussed in relation to functional capacity, health promotion, relationship development, increased optimism, and inclusion in meaningful life activities and roles (Wilhite & Shank, 2009). Participation in sport may also offer a valuable means of learning to adjust or cope with disability, particularly if the activity is considered enjoyable, personally meaningful, and provides a sense of accomplishment (Hutchinson, Loy, Kleiber, Douglas, & Dattilo, 2003; Taylor & McGruder, 1996). Furthermore, adaptive sport programmes have been shown to improve the quality of family and social life (Groff, Lundberg, & Zabriskie, 2009; Zabriskie, Lundberg, & Groff, 2005), providing opportunities to connect with friends, family, and the greater community (Dattilo, Caldwell, Lee, & Kleiber, 1998). Thus, opportunities to participate in sport offer benefits ranging from physical health and emotional wellbeing
to psychosocial growth and development. Although simply having access to sport participation provides an opportunity for individuals with disabilities to experience these benefits, exposure to quality experiences in sport may improve the likelihood of some benefits (e.g., coping with disability, Hutchinson et al., 2003; quality of life, Groff et al., 2009).

2.5 Quality Sport Participation among Persons with a Disability

While factors influencing the quantity of sport participation among persons with disabilities are well understood, substantially fewer resources have been dedicated to understanding the factors that shape the quality of sport participation (Evans et al., 2018; Shirazipour, Evans, et al., 2017). That being said, the elements that shape positive or quality sport experiences have been examined in other contexts. In youth sport, for example, the potential for sport to produce positive developmental experiences and outcomes has long been recognized (see Holt, 2016 for a review). Fraser-Thomas, Côté, and Deakin (2005) were the first to suggest youth sport programs as an avenue to foster positive youth development – a strengths-based approach that views children and adolescents as “resources to be developed, not problems to be managed” (Roth, Brooks-Gunn, Murray, & Foster, 1998, p. 442). Since this paper was published, research on the topic of positive youth development in sport has seen substantial growth (Holt, 2016) and culminated in the conception of a framework designed to account for the dynamic processes that occur over time to facilitate positive developmental outcomes for youth (Côté, Turnnidge, & Evans, 2014).

The Personal Assets Framework (Côté et al., 2014) posits that three dynamic elements – personal engagement in activities, quality relationships, and appropriate
settings – interact to shape the immediate sport experience. Through the accumulation of positive sport experiences, characterized by fun and enjoyment (Vierimaa, Turnnidge, Bruner, & Côté, 2017), youth develop personal assets in the form of confidence (i.e., self-belief in ability to be successful in sport), competence (i.e., technical, tactical, and physical ability), connection (i.e., quality of relationships and interactions with others), and character (i.e., engagement in moral behaviours) – described together as the 4 Cs (see Côté, Bruner, Strachan, Erickson, & Fraser-Thomas, 2010). Alignment of the dynamic elements and development of personal assets are considered to influence long-term outcomes, including performance, participation, and personal development (Côté, Strachan, & Fraser-Thomas, 2008).

Although the Personal Assets Framework was not developed in consideration of youth with disabilities, research exploring the experiences of youth in adapted sport programs lends partial support to Côté and colleagues’ (2014) conceptualization. For example, Martin (2006) demonstrated that sport enjoyment was a significant predictor of sport commitment among youth with physical impairments. Other factors correlated with sport commitment included perceived physical ability (i.e., competence) and friendship quality (i.e., connection). Alternatively, Turnnidge, Vierimaa, and Côté (2012) explored the experiences of youth with disabilities in a swim program that was widely regarded for developing positive values in athletes. Interviews with eight swimmers revealed the presence of four themes: (a) redefined capabilities (i.e., enhanced competence), (b) affirmed sense of self (i.e., increased self-confidence), (c) strengthened social connection (i.e., positive relationships with peers and adult role models), and (d) enhanced acceptance (i.e., acceptance of their own and other’s disabilities). In addition to these four
themes, participants discussed three processes that shaped their sport experiences, which included coach-athlete relationships, peer interactions, and the team environment.

Another line of research that provides valuable insight into our understanding of quality participation in adapted sport contexts is the work of Shirazipour and colleagues (Shirazipour, Aiken, & Latimer-Cheung, 2017a; Shirazipour, Aiken, & Latimer-Cheung, 2017b; Shirazipour, Evans, et al., 2017). Shirazipour, Evans, and colleagues (2017) explored the physical activity experiences of 18 military Veterans with a physical disability to understand the elements that constitute a quality experience in physical activities such as sport. Four quality elements were identified, including group cohesion, challenge, having a role, and independence and choice. Three factors were also considered to act as conditions of quality physical activity experiences: the physical and social environments, as well as program structure. While the conditions of quality physical activity experiences align well with the dynamic elements (i.e., settings, relationships, and activities) proposed by Côté and colleagues (2014), the elements were mapped onto four of the experiential aspects of participation defined by Martin Ginis and colleagues (2017). These included belongingness (i.e., group cohesion), meaning (i.e., having a role), autonomy (i.e., independence and choice), and challenge. Thus, partial support was shown for the conceptualization of participation put forward by Martin Ginis and colleagues (2017) in physical activity contexts.

Subsequent work by Shirazipour and colleagues explored strategies used to deliver physical activity programs among military Veterans with a physical disability (2017a), and evaluated the relationships among quality conditions, quality elements, and participation outcomes (2017b). Notably, coaches were identified as a key contributor to
the quality of participants’ physical activity experiences (Shirazipour et al., 2017a, 2017b). As a strategy for delivering physical activity programs, the inclusion of knowledgeable coaches and instructors, who understood participants’ fears and experiences, were considered to foster the quality elements of autonomy and mastery (Shirazipour et al., 2017a). Furthermore, the relationship between coaches’ interpersonal skills and three outcomes of physical activity participation – family integration, physical activity intentions, and physical activity planning – was mediated by the quality element of belongingness (Shirazipour et al., 2017b). Although focused more generally on physical activity and grounded in the perspectives of military Veterans with a physical disability, Shirazipour and colleagues have laid an important foundation for how we think about quality participation, and strategies for facilitating quality participation, in physical activity contexts such as sport. However, more work is needed to inform our understanding of quality participation in sport-specific contexts for civilians with a disability.

To address this need, Evans and colleagues (2018) synthesized existing literature and input from stakeholders to develop the Quality ParaSport Participation Framework. As implied, the framework centers on the concept of quality participation – an athletes’ broad subjective evaluation that his or her sport involvement is satisfying, enjoyable, and generates personally-valued outcomes. Aligning with the Personal Assets Framework (Côté et al., 2014), quality participation occurs as the result of repeated exposure to quality experiences in disability sport, which refer to an athletes’ ongoing appraisals of whether or not those experiences satisfy a range of task and/or social needs (i.e., autonomy, belongingness, challenge, engagement, mastery, and meaning; see Martin
Ginis et al., 2017). As such, athletes’ perceptions of the experiential elements differ from the immediate sport experiences described by Côté and colleagues (2014), which revolve around the concepts of fun and enjoyment. Additionally, the framework specifies 25 conditions that act as precursors to quality disability sport experiences, and subsequently, quality participation. While several of these conditions are necessary for participation to occur (e.g., accessibility of the environment), others explicitly enhance the quality of athletes’ participation in disability sport. Building from the work of Shirazipour, Evans, et al. (2017) and consistent with the dynamic elements described by Côté et al. (2014), these conditions fall into three categories specific to the disability sport context: the physical environment (i.e., the physical and structural components of sport settings), the social environment (i.e., the personal relationships formed with peers, coaches, and family, along with others in disability sport and the surrounding societal attitudes towards sport), and activities (i.e., the nature of the sport activity, which is governed by the rules of the sport and leaders of sport activities).

As highlighted in the works of Shirazipour and colleagues (2017a, 2017b) and Turnnidge and colleagues (2012), a key social agent in the creation of quality sport experiences for persons with a disability is the coach. In particular, five of the 25 conditions specified in the Quality Parasport Participation Framework – and almost half of the conditions categorized within the social environment – were linked to the knowledge, skills, and behaviours of the coach (Evans et al., 2018). These conditions include: (a) coaches’ knowledge, skill, and learning (Shirazipour et al., 2017a; Shirazipour, Evans, et al., 2017; Turnnidge et al., 2012), (b) coaches’ autonomy-supportive behaviours (Banack, Sabiston, & Bloom, 2011; Cheon, Reeve, Lee, & Lee,
(c) coaches’ monitoring of athlete improvement (Shirazipour et al., 2017a, Shirazipour, Evans, et al. 2017; Turnnidge et al., 2012), (d) coaches’ ability to develop roles for athletes (Shirazipour, Evans, et al., 2017), and (e) the interpersonal skills of the coach (Shirazipour et al., 2017b; Turnnidge et al., 2012). Additionally, coaches may have direct and/or indirect influences on several other conditions considered to promote quality sport experiences. For example, the coach may play a role in facilitating access or removing barriers to the sport environment (e.g., providing transportation or calling ahead to ensure the venue is accessible), fostering group cohesion among teammates (e.g., facilitating teambuilding activities), or demonstrating positive attitudes towards disability and disability sport (e.g., treating athletes with and without disabilities as equal).

While these findings and the conditions outlined in the Quality Parasport Participation Framework provide preliminary support for the relationship between coaches’ knowledge, skills, or behaviours and the quality of athletes’ participation in disability sport, the specific nature of these relationships remains unexplored. We know that coaches play an important role in shaping the quality of athletes’ disability sport experiences, but we know little about how coaches create quality disability sport experiences, or what these coach-created quality experiences look like in practice. In addition to building on existing work exploring quality participation in disability sport, this dissertation aimed to understand and optimize the role of coaches in creating quality experiences for athletes with disabilities across developmental contexts (i.e., from youth to adult and novice to high performance, including the many mixed and hybrid contexts in between). To further establish a need for this research, the current body of literature
examining coaches of athletes with a disability is reviewed in the following sections.

2.6 Coaches of Athletes with a Disability

Published research on the topic of disability sport coaching has been largely justified under the nascent claim that we do not know enough about coaches of sport for individuals with disabilities (e.g., Cregan, Bloom, & Reid, 2007; McMaster, Culver, & Werthner, 2012; Tawse, Bloom, Sabiston, & Reid, 2012). This argument comes in spite of the extensive body of research that exists to examine, understand, and evaluate the roles and influence of coaches in other settings (see reviews by Côté & Gilbert, 2009; Gilbert & Trudel, 2004). Underlying this claim is the notion that coaches assume unique roles and responsibilities in disability sport. In fact, coaches of athletes with disabilities employ many of the same skills as coaches of able-bodied athletes, in addition to those roles and responsibilities that are specific to the disability sport setting (Cregan et al., 2007). For example, Cregan and colleagues (2007) interviewed elite coaches of swimmers with a disability and noted significant overlap with research in able-bodied sport settings concerning coaches’ backgrounds and characteristics, as well as training and competition responsibilities. On the other hand, contextual factors unique to coaching swimmers with a disability, such as the need to ensure accessible training facilities and promoting equality among swimmers with and without disabilities, were identified.

The body of literature focused on disability sport coaches is small, but growing. On top of the argument that coaches of athletes with a disability are required to take on unique roles and responsibilities in disability sport, the underlying discourse that informs how coaches engage in disability sport fuels the need for further research in this area. Disability scholars suggest that how coaches “understand disability and apply it to the
coaching field will be influenced, either knowingly or unknowingly, by the models of
disability that capture how disability is understood in society” (Townsend et al., 2016, p.
81). However, few researchers in this area have engaged their work with the field of
disability studies (Townsend et al., 2016). The importance of research focused on
disability sport coaches is further underscored by evidence suggesting that para-athletes
who train without coaches are less consistent, more likely to over-train, and perform
worse than para-athletes who train with coaches (Dehghansai et al., 2017a). As such, this
dissertation attempts to fill current gaps in the disability sport coaching literature by
expanding what we know about coaches of athletes with a disability and situating this
work in relation to the social-relational and human rights models of disability. A critical
analysis of disability sport coaching research is provided below, highlighting knowledge
gaps and methodological weaknesses addressed within each chapter of this dissertation.

**Coaching effectiveness.** Generally speaking, coaches are recognized as important
social agents in the sport environment. In able-bodied sport settings, decades of research
document the importance of the coach-athlete relationship and the resulting impact on
athletes’ experiences and outcomes (see Côté & Gilbert, 2009; Gilbert & Trudel, 2004;
Horn, 2008 for reviews). Hundreds of studies have investigated the behaviours, roles, and
influences of expert, successful, experienced, elite, and great coaches (e.g., Alexander,
2017; Becker, 2009; Cregan et al., 2007; Debanne & Fontayne, 2009). Over the past 40
years, several conceptual models have been developed to represent what it means to
coach well (e.g., Chelladurai, 2007; Côté, Salmela, Trudel, Baria, & Russel, 1995; Horn,
2008; Jowett, 2005; Lyle, 2002; Mageau & Vallerand, 2003; Smoll & Smith, 2002). For
example, Horn (2008) defined effective coaching solely in terms of athletes’ outcomes:
Effective coaching…results in either successful performance outcomes (measured in terms of win-loss percentages, individual player development, or success at the national or international level) or positive psychological responses on the part of the athletes (e.g., high perceived ability, high self-esteem, intrinsic motivational orientation, or high level of sport enjoyment and satisfaction). (p. 240)

Considering the diversity in terms and definitions used to describe effective coaching, Côté and Gilbert (2009) sought to provide an integrative definition of coaching effectiveness that is conceptually grounded in relevant bodies of literature (i.e., coaching and teaching, athlete development, positive psychology). They identified three common variables with the potential to influence coaches’ practice: coaches’ knowledge and behaviours (e.g., Schempp, McCullick, & Mason, 2006), athletes’ experiences and outcomes (e.g., Horn, 2008), and the context (e.g., Lyle, 2002). Taken together, they defined coaching effectiveness as “the consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes’ competence, confidence, connection, and character in specific coaching contexts” (p. 316).

Among research focused on coaches of athletes with disabilities, there have been no attempts to examine or understand coaching effectiveness in disability sport. This paucity of literature is particularly salient considering the depth of research available in able-bodied sport settings. That being said, we can draw on the variables considered to inform coaching effectiveness more generally (i.e., coaches’ knowledge and behaviours, athletes’ experiences and outcomes, the context; Côté & Gilbert, 2009) in order to frame what we know about coaches in disability sport.

*Coaches’ knowledge and behaviours.* Among the literature focused on disability
sport coaches, perhaps the most notable foci include coaches’ knowledge, learning, and development (see Duarte, Culver, Trudel, & Milstedt, 2018 for a review). According to Côté and Gilbert (2009), three types of knowledge are encompassed within coaching effectiveness: professional (i.e., sport-specific, pedagogical), interpersonal (i.e., relationships with individuals and groups), and intrapersonal (i.e., self-awareness, introspection, reflection). Several studies have shown that disability sport coaches are more likely to have professional knowledge that stems from being or coaching an able-bodied athlete, as opposed to either general or sport-specific knowledge of disability (e.g., Cregan et al., 2007; DePauw & Gavron, 1991). New coaches often lack experience with disability, which is magnified by the fact that there are few opportunities to develop professional knowledge in disability sport – both formally (e.g., certification programs) and non-formally (e.g., conferences; McMaster et al., 2012). Limited experience with disability and few opportunities to develop professional knowledge may hinder coaches’ ability to understand and reflect, thus restricting intrapersonal behaviour. Among the few resources available for disability sport coach development, professional skills are often the focus – despite the importance of both intrapersonal (e.g., Taylor, Werthner, Culver, & Callary, 2015) and interpersonal (e.g., Banack et al., 2011) behaviours. In sum, research examining coach knowledge and behaviours in disability sport suggests: (a) professional knowledge is important, but there are few opportunities for professional development, and (b) resources that are available tend to focus on professional knowledge, and neglect intrapersonal and interpersonal skills. Thus, there is a general need for research and resources that support the intrapersonal and interpersonal knowledge and behaviours of coaches in disability sport.
**Athletes’ experiences and outcomes.** Of course, an understanding of coaches’ knowledge, learning, and development necessitates a focus on what coaching practices are best suited to support positive athlete experiences and outcomes. The second component of the coaching effectiveness definition – outcomes – is grounded in the youth development literature (i.e., the 4 C’s; see Côté et al., 2010). While other conceptualizations of effective coaching (e.g., Horn, 2008) describe broad outcomes, such as performance (e.g., win-loss percentages) or positive psychological responses (e.g., sport enjoyment), Côté and Gilbert (2009) argue that the 4 Cs provide more specific, yet comprehensive ways of understanding athletes’ outcomes in sport. In disability sport, however, few studies have explicitly linked the coach to athletes’ outcomes.

One example of a coach behaviour that has been positively associated with athletes’ outcomes in disability sport is autonomy support. Autonomy-supportive behaviours have been linked to improvements in Paralympic athletes’ motivation (Banack et al., 2011) and performance (Cheon et al., 2015). Furthermore, elite disability sport coaches perceive themselves as playing an important role in athlete development (Tawse et al., 2012) and group cohesion (Falcão, Bloom, & Loughead, 2015). Of particular relevance to this dissertation, disability sport coaches have also been identified as important social agents in shaping the sport experiences of athletes with disabilities (Evans et al., 2018; Shirazipour et al., 2017a, 2017b; Shirazipour, Evans, et al., 2017; Turnnidge et al., 2012). In general, more research is needed to explicate the relationship between coaches’ knowledge and behaviours and athletes’ experiences and outcomes in disability sport (i.e., what types of experiences and outcomes do coaches’ produce for
athletes with disabilities, and how are these experiences and outcomes achieved?).

**The context.** The third and final component of the coaching effectiveness definition refers to the context in which the coach operates. Within disability sport, there are a variety of contexts worth consideration. At the most basic level, competitive level can be used to define two broad categories of sport: participation (e.g., recreational clubs or social leagues) and performance (e.g., developmentally-focused or high performance programs; Lyle, 2002). Unlike most mainstream sports, disability sport programmers must often cater to participants with a wide range of experience and abilities, in addition to varied ages and gender (McMaster et al., 2012). While pockets of research exist across contexts in disability sport – encompassing varied developmental stages (e.g., novice: Davey, 2014; elite: Cregan et al., 2007), sport types (e.g., individual sports: Turnnidge et al., 2012; team sports: Tawse et al., 2012), integration with able-bodied athletes (e.g., integrated vs. segregated: Spencer-Cavaliere & Peers, 2011), and demographic-specific programming (e.g., youth: Turnnidge et al., 2012; military: Shirazipour, Evans, et al., 2017) – disability sport coaches have yet to be contrasted across developmental stages or contexts. In light of a more general need for empirical research examining disability sport coaches, researchers are thus faced with the task of exploring the relationship between coaches’ knowledge and behaviours and athletes’ experiences and outcomes across these more varied sport contexts. In particular, this dissertation will focus on disability sport contexts defined according to developmental stage, including youth and adults with disabilities in integrated and segregated settings of any sport type.

**Methodological limitations.** As shown, a number of knowledge gaps exist in the disability sport coaching literature. Additionally, a number of methodological limitations
remain to be addressed. Currently, research focused on disability sport coaches and athletes with disabilities tends to fall into disparate categories. What we know about coaches’ knowledge and behaviours in disability sport is frequently obtained through small-scale questionnaire studies or semi-structured interviews with coaches (e.g., Cregan et al., 2007; DePauw & Gavron, 1991; Duarte & Culver, 2014; McMaster et al., 2012). Similar methods are often used to examine the role that coaches’ play in shaping athletes’ experiences in disability sport, which stems from either the coach’s perspective (e.g., Falcão et al., 2015; Tawse et al., 2012) or the athletes’ perspective (e.g., Banack et al., 2011; Turnnidge et al., 2012). The results of these studies are primarily descriptive and point to a need for not only more research focused on disability sport coaches, but also more research employing novel methods and forms of analyses to inform a nuanced understanding of the complex relationship between disability sport coaches and their athletes. In particular, the perspectives of athletes should be emphasized or triangulated with those of the coach to enhance our understanding of coaching effectiveness – encompassing the effect of coaches’ knowledge and behaviours on athletes’ experiences and outcomes – in the disability sport context, while engaging research with disability sport coaches in the field of disability studies.

In summary, there is a large body of literature supporting the coaching effectiveness definition in able-bodied sport settings; however, we know little about what “effective coaching” means in disability sport. Specifically, we know little about how coaches may influence the experiences or outcomes of the athlete, and how these interactions may be affected by the surrounding context. As such, the purpose of Manuscript 2 was to examine athletes with physical disabilities’ perceptions of how
coaches shaped their experiences in disability sport over the course of development. In doing so, the findings of this study were used as a lens through which to explore Côté and Gilbert’s (2009) coaching effectiveness definition in disability sport. Furthermore, this study highlighted the voices of athletes with disabilities to address the need for research focused on athletes’ perspectives (e.g., Culver & Werther, 2018). Building on this work, the purpose of Manuscript 3 was to explore how model disability sport coaches (i.e., coaches with a recognized ability to create quality experiences for athletes with a disability) shaped successful programs. This purpose was achieved through a collective case study of disability sport programs across varied contexts, which involved collecting and analyzing multiple data sources in order to triangulate perceptions of what constitutes quality experiences in disability sport, and the coaches’ role in fostering such experiences. Thus, we aimed to expand the extant literature focused on disability sport coaches, and enhance current understandings of how coaches foster positive experiences and outcomes for athletes with disabilities through the use of innovative methods and multiple perspectives.

2.7 Knowledge Translation for Coaches of Athletes with a Disability

Another area of research that has received significant attention in the able-bodied sport literature is the development of evidence-informed and empirically-evaluated interventions aimed to enhance coaches’ knowledge and behaviours (Lefebvre, Evans, Turnnidge, Gainforth, & Côté, 2016). In a review of coach development programs spanning empirical research (e.g., intervention studies) and applied practice (e.g., national accreditations, private initiatives), Lefebvre and colleagues (2016) identified 285 programs targeting coaches’ professional knowledge \((n = 261)\), interpersonal knowledge
(n = 18), and intrapersonal knowledge (n = 6). All of these programs were classified as formal (e.g., accreditation or certification) or nonformal (e.g., conferences or workshops) learning opportunities, including 34 programs that were either developed or evaluated in the context of empirical research. In contrast, research with coaches in disability sport highlights a lack of formal and nonformal opportunities for coach learning (see Duarte et al., 2018 for a review). Furthermore, only one research-informed intervention targeting disability sport coaches has been reported in the literature (Cheon et al., 2015). Consequently, there is an urgent need to address the gap between research and practice for disability sport coaches.

The only intervention to be implemented with disability sport coaches and evaluated in the academic literature involved the adaptation of a workshop originally designed to teach autonomy-supportive behaviours to physical education teachers in able-bodied settings (Cheon et al., 2015). Specifically, Cheon and colleagues (2015) evaluated the effects of this adapted workshop, which was delivered to Korean Paralympic coaches. Athletes of coaches who participated in the workshop reported higher levels of motivation and won more Paralympic medals than athletes of coaches in the control group, demonstrating that coach training can have a positive effect on athletes’ outcomes. Considering the lack of formal and nonformal opportunities for disability sport coach learning (Duarte et al., 2018), and the potential for coaches to create quality experiences for athletes with disabilities (Evans et al., 2018), the purpose of Manuscript 4 was to produce a novel evidence-informed learning tool for coaches that communicates best practices for facilitating quality disability sport experiences.

Provided that few resources exist for the purpose of disability sport coach
learning, a number of options exist for the development of effective learning tools. One option that may be particularly well-suited to the needs of disability sport coaches is ethnographic creative nonfiction. An ethnographic creative nonfiction is a story grounded in research findings and composed using the techniques of fiction (Sparkes, 2002). As a learning tool, ethnographic creative nonfiction has the ability to deliver knowledge from a body of literature in a detailed and evocative manner (Ellingson, 2009; Smith et al., 2013). In doing so, this genre offers a means of addressing the social relational nature of disability, and the embodied experience of disability sport coaching – dimensions that are often considered lacking or “thin” in the disability sport literature (Smith & Sparkes, 2012). Stories enable a “more memorable, more human and more understandable” approach to the evidence (Smith, Papathomas, Martin Ginis, & Latimer-Cheung, 2013, p. 2047), which increases the knowledge translation potential of the research. When written to reflect everyday language and human experience, to engage emotion, stimulate imagination, and produce meaning, storied forms of research are accessible to knowledge users (e.g., coaches and coach educators) beyond simply the academic domain (Smith et al., 2013; Sparkes, 2002).

While story-based learning tools have seen little uptake in the coach education literature, they have been used prominently, and proven to be effective, in other settings. For example, short stories have been used to communicate the physical activity guidelines to individuals with spinal cord injuries (Smith et al., 2013), and to deliver health evidence to parents of children with croup (Hartling et al., 2010). In each of these cases, participants found the narrative format enjoyable and valuable for conveying health information (Hartling et al., 2010; Smith, Tomaseone, Latimer-Cheung, & Martin
Ginis, 2014). Alternatively, researchers have shown that narrative forms of communication are effective for changing behaviour in the areas of education (e.g., promoting school engagement; Rosario et al., 2016) and public health (e.g., increasing mammograms, Kreuter et al., 2010; reducing smoking, Suk Kim, Bigman, Leader, Lerman, & Capella, 2012).

In one of the few examples of ethnographic creative nonfiction in coach education, Douglas and Carless (2008) used stories to represent the experiences of elite female golfers in a seminar for golf coaches. After analyzing coaches’ written responses, they determined that coaches typically respond to stories by questioning, summarizing, or incorporating the story into their own experiences. In a similar vein, Culver and Werther (2018) co-constructed poems to represent the voices of para-athletes on the topic of successful coaching. The findings from each of these studies suggest that storied forms of research hold potential as an effective coach learning tool (e.g., demonstrating personal reflection, engagement, and emotional connection; Douglas & Carless, 2008); however, in each of these cases, the stories and poems were based on research from a single dataset and were not developed explicitly for the purpose of coach education. While storied forms of research have been used to synthesize large bodies of work in other settings (e.g., promoting physical activity for individuals with spinal cord injury; Smith et al., 2013), none have taken a systematic approach to the development of an ethnographic creative nonfiction. As such, Manuscript 4 outlines a rigorous, detailed, and systematic process for developing a story-based learning tool.

2.8 Summary of Objectives and Research Approach

This dissertation aims to address a number of knowledge gaps and
methodological limitations that exist within the disability sport literature. To begin, few studies have focused explicitly on the concept of quality participation in disability sport – particularly across athlete development. Therefore, the purpose of Manuscript 1 was to explore the meanings that current and former athletes with physical disabilities attribute to their participation in disability sport over time. Among the literature that has explored the experiences of athletes with disabilities, coaches have been identified as a key social agent in the creation of quality disability sport experiences. That being said, we know little about how coaches create quality experiences for athletes with disabilities. As such, the purpose of Manuscript 2 was to examine athletes with physical disabilities’ perceptions of how coaches shaped their experiences in disability sport over the course of development. Considering the paucity of literature concerned with coaching effectiveness in disability sport, this study also explored the feasibility of Côté and Gilbert’s (2009) coaching effectiveness definition in the disability sport context. Building on this work, the purpose of Manuscript 3 was to explore how model disability sport coaches (i.e., coaches with a recognized ability to create quality experiences for athletes with a disability) shaped successful programs. Finally, despite the potential for coaches to facilitate quality experiences for athletes in disability sport, there are few resources available to support coach learning. Thus, the purpose of Manuscript 4 was to produce a novel evidence-informed learning tool for disability sport coaches that communicates best practices for facilitating quality experiences for athletes with disabilities.

Guided by the KTA framework, the overarching purpose of this dissertation is to explore and enhance participation in disability sport by understanding and optimizing the role of the coach across developmental contexts. Taken together, Manuscripts 1-3
provide first-generation knowledge on the topics of athlete development, quality participation, and coaching effectiveness in disability sport, and are thus situated within the knowledge inquiry stage of KTA. Alternatively, Manuscript 4 synthesizes first-generation knowledge obtained from Manuscripts 1-3 alongside other relevant sources of literature to develop a learning tool for disability sport coaches. Thus, Manuscript 4 represents the knowledge synthesis and knowledge product development stages of the KTA framework.

The objectives of this dissertation are achieved through the use of qualitative methodologies and approaches. Given that Manuscripts 1-3 were exploratory in nature and focused on a small yet diverse population of individuals, qualitative approaches were ideal for providing in-depth and contextually rich information. Manuscript 4 draws on existing qualitative processes and products to present a systematic and rigorous approach to the synthesis and representation of data in the form of an ethnographic creative nonfiction. In using qualitative methodologies and approaches, this dissertation is aligned with a relativist ontology (i.e., reality is multiple, subjective, and mind-dependent) and constructionist epistemology (i.e., knowledge is subjective and socially constructed). Thus, to provide necessary context for this research and interpretations of the findings, my positionality as the researcher is described below.

**Researcher positionality.** First and foremost, in the context of this research, I am able-bodied. As such, I am unable to access and fully understand the unique experiences of those individuals who live with impairment. However, I was able to draw on my previous experiences volunteering with individuals with disabilities in rehabilitation and physical activity contexts to inform my interpretation of the participants’ perspectives.
Furthermore, as a competitive distance runner with previous recreational involvement in a variety of sports, I was able to relate to many of the participants (coaches and athletes alike) over the experience of being an athlete. Although my knowledge of the rules and culture within each sport was limited, I endeavored to learn and apply my own athletic experiences in order to optimize my understanding of each distinct context. That being said, I often found a need to check my biases throughout the research process. Provided that I am extensively educated and routinely immersed in a sport-related field, in addition to leading an active lifestyle and pursuing my own competitive goals, I found myself routinely challenged by the perspectives of individuals who approached sport with objectives and views that were different from my own. For example, I worked with one team in which several athletes took regular breaks to smoke cigarettes throughout the practice. Although I initially viewed this behaviour negatively through the lens of my own health and performance, I came to realize that these breaks were an important component of the social culture of the team, and afforded the athletes with opportunities to bond socially during practice time. Moreover, as I developed relationships with participants (e.g., some participated in more than one study, while others became friends and colleagues), I felt that I was able to achieve a degree of understanding that reflected this enhanced level of access into participants’ underlying motivations and perspectives. Thus, the following dissertation represents my interpretations – as an educated, able-bodied, Caucasian female – of the views and practices of athletes with disabilities and their coaches in disability sport.
2.9 References


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Chapter 3

Narratives of Participation among Individuals with Physical Disabilities: A Life-course Analysis of Athletes’ Experiences and Development in Disability Sport


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3.1 The Fit of Manuscript 1 within the Dissertation

Manuscript 1 falls within the ‘knowledge inquiry’ stage of the KTA framework. Specifically, this study targeted the perspectives of athletes with physical disabilities in order to enhance researchers’ understandings of the meanings that athletes attribute to their participation in disability sport over time. These findings both support and extend existing conceptualizations of quality disability sport participation, thus contributing towards the overall purpose of the dissertation. By acquiring this knowledge, this study provided a lens through which to examine effective disability sport coaching in Manuscripts 2 and 3. When synthesized alongside other relevant sources of knowledge, including Manuscripts 2 and 3, this knowledge also contributed towards the development of a knowledge product (i.e., learning tool) for disability sport coaches presented in Manuscript 4.
3.2 Abstract

Efforts to promote full participation in disability sport are vital not only for the potential physical and psychosocial benefits, but also as a means of enacting social justice. Until recently, there has been little empirical consideration of the experiential aspects that make participation satisfying or meaningful throughout the life-course. The purpose of this study was to explore the meanings that athletes with physical disabilities attribute to their participation in disability sport over time. Two-part life history interviews were conducted with 21 current or former athletes with a physical disability. Interviews were transcribed verbatim and subjected to a dialogical narrative analysis, which enabled an in-depth examination of the common stories told by athletes and the effects of these stories on their past, present, and future participation. Five distinct narrative types were identified, representing differential developmental trajectories and meanings of participation in disability sport. Athletes drew on existing narratives of disability (i.e., restitution, quest) and sport involvement (i.e., performance, discovery, relational) to frame these narrative types. The core of each narrative type was formed by the specific meaning or value associated with disability sport participation (e.g., sense of purpose, social acceptance). The resulting narratives offer a unique understanding of the developmental pathways of disability sport athletes and what it means for these athletes to participate. The narratives are useful for informing strategies and programmes that optimize participation and enhance participation rates.
3.3 Introduction

Over the past several years, research on disability has received growing attention in the field of sport psychology. While participation in sport may offer a variety of potential physical and psychosocial benefits (e.g., Slater & Meade, 2004), sport participation rates among people with disabilities remain much lower than rates reported by their able-bodied counterparts (e.g., Martin Ginis et al., 2010; Sport England, 2016). Efforts to promote full participation in sport are vital not only for the potential benefits. Recent calls within sport psychology (Schinke, Stambulova, Lidor, Papaioannou, & Ryba, 2016) and research with disabled athletes (Smith, Bundon, & Best, 2016) has also emphasized the significance of understanding participation in terms of social justice. Supporting these calls, the United Nations (2006) has declared that individuals with a disability have a basic right to “full and effective participation” in society, including in sport. According to the World Health Organization (2001), participation is defined as an individual’s involvement in life situations. Expanding this definition, full and effective participation considers both the quantity and quality of an individual’s participation (Hammel et al., 2008; Martin Ginis, Evans, Mortenson & Noreau, 2017). In other words, an individual is fully and effectively participating when he or she engages in an activity to the extent to which he or she pleases (quantity) and has a positive subjective experience (quality).

In order to promote full and effective participation in sport and determine whether people with a disability experience this basic right, researchers must focus their attention on both the quantity and quality of participation. Although there is a growing body of literature focused on athletes with disabilities, there is very little research focused on the
quality of athletes’ participation in disability sport (e.g., Turnnidge, Vierimaa, & Côté, 2012). To date, significant resources have been dedicated to understanding the barriers and facilitators associated with physical activity participation, highlighting factors at the intrapersonal (e.g., self-perceptions, body functions), interpersonal (e.g., social support, societal attitudes), institutional (e.g., rehabilitation, building design), community (e.g., products and technology for education, sport, etc.), and policy (e.g., health, transportation) levels (Martin Ginis, Ma, Latimer-Cheung, & Rimmer, 2016). As demonstrated, a complex and extensive array of barriers have the potential to preclude participation in disability sport. However, without knowledge of what quality means or how quality is experienced over time in disability sport, our understanding of how to develop and deliver quality sport programmes for people with disabilities will remain limited. It is therefore vital that researchers address the knowledge gap concerned with the quality of participation in disability sport.

According to Martin Ginis and colleagues (2017), a holistic operationalization of participation should encompass “the meanings and satisfactions that an individual derives from participating” (p. 2). These authors completed a configurative review of the participation literature focused on individuals with physical disabilities in which six common themes were identified and recommended for inclusion in future conceptualizations of participation. These themes include: autonomy – having independence, choice, or control; belongingness – a sense of belonging or acceptance in a group; challenge – feeling appropriately challenged; engagement – feeling engaged, focused, and motivated; mastery – experiencing achievement, competence, and self-confidence; and meaning – contributing towards obtaining a personal or socially-
meaningful goal (Martin Ginis et al., 2017).

Although the quality of participation has yet to be examined explicitly within disability sport contexts, efforts to understand the sport and physical activity experiences of individuals with physical disabilities have emerged in recent years. For example, Turnnidge and colleagues (2012) interviewed swimmers in an acclaimed swim program for youth with disabilities. Swimmers discussed how their participation in the program contributed to redefined capabilities, an affirmed sense of self, strengthened social connections, and enhanced acceptance (Turnnidge et al., 2012). Outside of the youth sport context, more recent work has examined the quality of physical activity experiences among military veterans with a physical disability – highlighting challenge, group cohesion, individual roles, and independence and choice as key contributors to quality experiences while participating in physical activity (Shirazipour et al., 2017). Thematic overlap between these findings and themes identified within the participation literature offer support for the conceptualization of participation proposed by Martin Ginis et al. (2017).

One methodological approach that has been used to understand the diverse, complex, and nuanced lives of athletes with disabilities is narrative inquiry. By viewing people as storytelling beings, narrative inquiry is a tradition of qualitative research that uses stories to understand life experiences and assist in the production of meaning (Sparkes & Smith, 2014; Smith & Sparkes, 2009). To demonstrate, narratives have been used to understand athletic identity after acquiring a permanent physical disability (Perrier, Smith, Strachan, & Latimer-Cheung, 2014), the role of sport in promoting posttraumatic growth following permanent acquired disability (Day & Wadey, 2016), and
meanings of hope after experiencing a spinal cord injury through sport (Smith & Sparkes, 2005). Day (2013) highlights physical activity participation as an arena for meaning-making after acquiring a permanent physical disability. In telling stories, people make meaning and communicate in intelligible ways to other people; thus, the telling of stories helps athletes to make better sense of their participation and share personal knowledge about it. In telling such personal life stories, people also shape their identities and the ways in which they choose to participate. For example, the identities formed through the stories that people tell after acquiring a permanent physical disability can either impede or facilitate the trauma recovery process (Day, 2013; Day & Wadey, 2016).

For these reasons, narrative inquiry may offer a useful medium for the communication and interpretation of athletes’ personal stories about their participation in disability sport – enabling in-depth perspectives on the elements that contribute to meaningful disability sport experiences. Considering the relative dearth of literature focusing on the quality of athletes’ participation in disability sport, the purpose of this study was to explore the meanings that current and former athletes with physical disabilities attribute to their participation, and the quality of this participation, in disability sport over time. Using a narrative approach, we sought to address the following objectives: (a) to explore and typify narrative types that athletes with physical disabilities draw on from culture to represent their participation in disability sport, and (b) examine the meanings and conditions that shape disability sport participation over time within each narrative type.

3.4 Methodology and Methods

Narrative inquiry. Within narrative inquiry, people are viewed as meaning-
making creatures, and a crucial way to make meaning, as well as communicate these meanings, is through stories (Smith & Sparkes, 2009). This research was underpinned by two assumptions: ontological relativism (i.e., reality is multiple, subjective, and mind-dependent) and epistemological constructionism (i.e., knowledge is subjective and socially constructed) (Sparkes & Smith, 2016). We adopted narrative constructionism as the specific methodology – a socio-cultural approach that conceptualizes human beings as storytellers who draw on the narratives made available to us through social relations and culture (Smith, 2015). As such, narratives are broad cultural resources that can be classified as a certain type (e.g., “rags to riches”) that is crucial for helping to structure our personal stories, make meaning, and communicate experiences. Narrative inquiry considers language to be constructive, meaning that stories constitute our psychological realities (e.g., Smith et al., 2016). Thus, the stories athletes tell about their participation in disability sport may offer key insights into the subjective or experiential aspects of participation, as well as the broader social and cultural resources that inform such perspectives. Language also offers a performative function (Wiggins & Potter, 2008). The stories we tell are not merely passive representations of our thoughts, attitudes, feelings, or actions; rather, storied language provides a medium for action (Frank, 2010; Smith, 2015). Through language we are able to accomplish “social actions and realities” (Atkinson, 2015, p. 93) with the potential for both individual and broad societal impact (e.g., full and effective participation; United Nations, 2006).

**Participants and sampling.** After obtaining ethics approval (see Appendix A), participants were recruited using maximum variation and criterion-based purposive sampling strategies (Sparkes & Smith, 2014). While maximum variation sampling
enabled a broad range of perspectives concerning the factors that comprise or shape participation in disability sport activities, criterion-based sampling ensured that participants shared certain attributes that made them eligible for this study. Specifically, we sought the views of Canadian men and women, 18 years of age or older, with congenital or acquired physical disabilities and experience (i.e., a minimum of one season) participating in disability sport. Disability sport was further operationalized to include competition and/or training for the purposes of competition as an individual or on a team at any competitive level, from recreational to elite.

Using publically available contact information via the Canadian Paralympic Committee’s online database, the first author contacted disability sport clubs and organizations via e-mail (see Appendix B). Contacted individuals (e.g., coaches, administrators) were asked to forward a letter of information about the study to athletes who met the criteria for inclusion (see Appendix C). Interested athletes were asked to contact the first author directly. Twenty-one people met the criteria for inclusion and agreed to participate, including 9 women and 12 men ranging in age from 19 to 73 ($M = 33.7, SD = 14.5$). Nearly all of the participants identified as Caucasian, while one participant identified as biracial. Approximately one-third of the sample was comprised of individuals with congenital physical disabilities, such as cerebral palsy, spina bifida, and muscular dystrophy ($n = 6$). The remaining participants included individuals with acquired physical disabilities, including amputation, spinal cord injury, and other impairments ($n = 15$). Years post-injury for individuals with acquired disabilities ranged from 2 to 35, with a mean of 12.3 years ($SD = 9.6$). On average, participants had been involved in sport (able-bodied or adapted) for 20.8 years ($SD = 15.0$, range = 2-54), and
disability sport for 10.9 years ($SD = 8.9$, range $= 2-35$). Past and current participation in disability sport ranged across a variety of sport types, including individual (i.e., adapted waterskiing, boccia, hand-cycling, para-alpine, para-archery, para-athletics, para-nordic, para-rowing, para-swimming, para-triathlon) and team sports (i.e., power wheelchair hockey, sitting volleyball, sledge hockey, wheelchair basketball, wheelchair curling, wheelchair rugby).

**Data collection.** Each participant took part in a retrospective life history interview consisting of two independent sessions. Life histories, or “the unfolding of an individual’s experiences over time” (p. 82), seek to situate personal stories in relation to broader social context (e.g., concepts, norms, practices; Schwandt, 1997). With an explicit focus on the relationship between storytelling and broader socio-cultural resources, life history interviews are well suited to a narrative approach. A two-session format was chosen to address each of our research objectives: First, to explore narrative structure in relation to participants’ experiences of disability sport participation (i.e., the “plotline”), and second, to examine the specific meanings and influential factors captured within each participant’s story. The interview guides for each session are provided in Appendix D.

In the first session, the interviewer and participant worked collaboratively to co-create a physical timeline of the participant’s sport and/or disability sport involvement (Adriansen, 2012). Using banner paper and writing utensils, the participant either recorded or guided the researcher in recording specific activities, important moments, and major life transitions or milestones experienced by the participant in relation to sport and/or disability sport involvement throughout the life course. For each activity that was
recorded on the timeline, the interviewer asked specific questions about the nature of the activity (e.g., “How often did you take part in this activity?”; “What was the (competitive) level of your participation, and when did it change?”; “Tell me about the reasons you started/stopped participating in this activity”, “How did participation in this activity make you feel?”). At the end of the first session, participants were asked to reflect on the activities included on their timeline using probes such as “Tell me about the activities that meant the most/least to you”. For interviews conducted in person, this timeline was retained and used as a tool to facilitate recall and stimulate discussion during the second session (Adriansen, 2012). Alternatively, the timeline was converted into an electronic format and e-mailed to the participant to be verified and used as a reference during online or phone interviews.

The second session was conducted within two weeks of the first, allowing time for the participants to reflect on their timeline. An open-ended interview guide was used to elicit key information concerning the activities, relationships, environments, and outcomes associated with key experiences represented on their timeline. For example, participants were asked questions such as: “What would you consider to be an ideal disability sport environment?”, “Who would you consider to be the most influential person in shaping your disability sport involvement?”, “How did you feel when you were engaged in [disability sport activity]?”, and “What were the most valued elements of your experiences in disability sport?” The interview guide was adapted from the work of Shirazipour et al. (2017). Follow-up questions were used to supplement the interview guide and elicit rich data, providing opportunities for explanation and elaboration (Sparkes & Smith, 2014).
Interviews were conducted in person at the preferred location of the participant \((n = 7)\), as well as over the phone \((n = 4)\) or using online interfaces such as Skype \((n = 10)\) to accommodate participants from diverse geographical locations. Informed written consent was obtained either in person or by asking participants to scan and e-mail the signed consent form back to the first author. Verbal consent was also confirmed prior to beginning each interview. While some non-verbal cues (e.g., facial expression, body language) may be lost during online audiovisual or phone interviews, opportunities to interpret other cues (e.g., tone of voice, cadence of speech) remain present (Sparkes & Smith, 2014). Furthermore, comparisons between face-to-face and telephone interviews have demonstrated that both modes of interviewing enable rich interview data and capture a similar level of detail (Cachia & Millward, 2011). By including two interview sessions, the interviewer was provided with extended opportunities to enhance participant rapport – regardless of the medium used to perform the interview. On average, 127 minutes (~2 hours) of audio were recorded per participant across the two-session interviews.

**Data analysis.** All interviews were audio recorded and transcribed verbatim. Subsequently, a dialogical narrative analysis was performed. A dialogical narrative analysis “studies the mirroring between what is told in the story – the story’s content – and what happens as a result of telling that story – its effects” (Frank, 2010, p. 71-72). As described by Frank (2012) and Smith (2015), the following steps were used to guide the analysis. First, a period of indwelling was carried out. Indwelling involved reading over the interview transcripts while listening to the corresponding audio recordings and writing down preliminary notes. The objective of the second step was to sketch out a
prototypical life course or “plotline” for each participant’s life history, which involved identifying thematic foci (i.e., factors comprising or influencing participation in disability sport) and dynamics of the plot (e.g., direction – stability, decline, or progress; tone – positive or negative; language – at a ‘turning point’ or ‘crossroads’), as well as narrative resources that may have been used to help structure the story. The third step focused on identifying narrative themes and thematic relationships. By taking a more in-depth look at the thematic foci of each narrative, the factors that shaped athletes’ experiences in disability sport were examined for common threads or patterns over the course of each life history.

Throughout the analysis, the technique of analytical bracketing was used to focus separately and exclusively on structure (i.e., how the narrative was constructed over time) and content (i.e., what was told in the narrative). By first focusing on the structure of each narrative and subsequently returning to each narrative with a thematic lens, similarities and differences between participants could be viewed according to the narrative typologies that were constructed as a whole (e.g., Perrier et al., 2014; Smith & Sparkes, 2012). This approach enabled a more profound understanding of the meanings participants attached to their experiences in disability sport.

**Methodological rigour.** Consistent with ontological relativism and epistemological constructionism, a flexible list of criteria was developed to evaluate this research (Sparkes & Smith, 2014; Smith & McGannon, 2017). In other words, the criteria for judging the quality of this research were not viewed as universal or concrete, but rather could be drawn from a dynamic list of relevant traits (Smith & Deemer, 2000). Lieblich, Tuval-Mashiach, and Zilber (1998) proposed four criteria for evaluating
narrative research, which formed the foundation for our list: width (i.e., comprehensiveness of the interview), coherence (i.e., constructing a meaningful picture of participants’ experiences), parsimony (i.e., a coherent analysis based on a smaller number of concepts that has aesthetic appeal for readers), and insightfulness (i.e., originality in the story presented). Alongside these criteria, two additional items were added to the list: reflexivity and rich rigour (Sparkes & Smith, 2014). Several strategies and techniques were used to achieve these criteria. Width was sought through comprehensive two-part life history interviews, designed to encourage reflection and expansion on key experiences. Participants were allowed to reflect on their interview transcripts and our analytical interpretations to encourage continued interpretation and collaboration (Smith & McGannon, 2017). Both coherence and parsimony were sought too by situating our findings within the broader participation literature; specifically, by organizing the narratives around thematic elements linked to existing conceptualizations of participation (Lieblich et al., 1998). To demonstrate insightfulness, we aimed to answer a novel research question grounded in the individual stories of a diverse range of participants (e.g., Perrier et al., 2014). Finally, the first author engaged in reflexive journaling throughout the research to explore and critically reflect on prior assumptions or biases and ongoing interpretations of the data, while the second author acted as a “critical friend” – a “theoretical sounding board” during the analytical process (Sparkes & Smith, 2014, p. 182). For supplemental details concerning the methodology and methods, please refer to Appendix E.

3.5 Results

Five distinct narrative types were identified, representing and constituting
differential developmental trajectories and experiences of participation in disability sport. For each narrative type, the results are presented as follows: (a) demographic details of participants, (b) a brief summary of the narrative, (c) a temporal description of participants’ disability sport trajectory, including the elements and conditions that foster the quantity and quality of participation over time, and (d) an interpretation of meanings associated with quality participation. To conclude this section, one overarching theme spanning across the five narrative types is described.

**A Cinderella story.** Six of the life histories represented a narrative type named ‘a Cinderella story’. The participants who told this type of story were predominantly women with congenital disabilities or impairments acquired at a young age (i.e., ages 12-14). The women who drew on ‘a Cinderella story’ described their early sport and disability sport experiences in terms of a relational narrative. In a relational narrative, personal satisfaction is not dependent on the fulfillment of one’s own needs or sense of self; rather, this narrative is centered on interpersonal relations and the need to satisfy other people (Douglas & Carless, 2006; Lieblich et al., 1998). With opportunities for personal growth and development, the relational narrative was eventually replaced by a narrative of discovery – which focuses on exploring, discovering, and experiencing life in a full and multidimensional sense (Douglas & Carless, 2006). The overarching story told by these participants can be described as follows: “Without disability sport, I wouldn’t be who I am today. Participation has empowered me to accept my disability, overcome my fears, and live life to the fullest.” For example, Joanne describes how her life changed when she got involved in disability sport:

When I was 12 the doctor said I’d never play sports again... So, from the age of 12 to the age of 20 there was no sport at all. And you know I didn’t even want to
look at somebody with a disability because people were portrayed as, they weren’t, people with disabilities back then weren’t in the media or you didn’t see any Paralympic sports or anything like that so nobody really knew… But being involved in sport has brought out my confidence… you’re meeting new people; you’re trying something new. If you fall, you try it again and the encouragement with all my people, at the [disability sport venue] with my new group of friends was like a life changing moment. Because if it wasn’t for that, I sure wouldn’t be the person I am today.

The plotline for participants in ‘a Cinderella story’ was driven along two main axes: the desire for social acceptance and emerging independence. All of these participants were introduced to sport as children (e.g., ages 6-12). Those who were born with disabilities – Anna, Danielle, and Isabelle – began participating in gym classes and ‘pick-up’ sports with able-bodied peers and siblings. These participants described feeling out of place in their early sport experiences, often unable to fully participate (e.g., keeping score instead of playing). They were not presented with opportunities to take part in disability sport until they were older (e.g., ages 12-16), facilitated by local coaches or teachers. Quinn, Sylvie, and Joanne, on the other hand, recalled the fun and enjoyment of organized sports as able-bodied children. Following rehabilitation post-injury (ages 14-16), Quinn and Sylvie returned to sport participation with able-bodied peers; however, they struggled with anxiety and confidence regarding their abilities. At the age of 12, Joanne was told by her doctors that she would never play sports again. For many of these women, the transition into disability sport was not easy. Several participants lacked financial or social support that hindered or prevented early disability sport involvement, while other personal experiences (e.g., physical or mental illness) also reduced the capacity for and quality of participation.

Opportunities for personal growth – such as attending postsecondary school or
taking on new roles (e.g., coaching) – provided an important catalyst for change during the transition from adolescence to adulthood (e.g., ages 17-20). Participants were able to realize their own needs and desires, culminating in a personal decision to engage or re-engage with disability sport in new and meaningful ways. For example, after living independently for the first time, Anna describes her decision to return to her former disability sport club:

I was in the gym and this old man came up to me and said, “have you heard of [disability sport club]?” And I’m like, “yeah I was on it before, you know when I was younger, but I quit ‘cause I was just, there was just so much going on I couldn’t do it anymore” and he’s like, “well you should go back on it” … So I went home and I gave it some thought and I, I messaged [coach] and I’m like, “is there any way I could come back on the swim team?” … I still had a lot of the skills that [coach] taught me… um the goal wasn’t to make nationals standard, or really any standard until the next year but I made it from regional to provincial to national all in one year… It was just the maturity level and the motivation, I think it became a better experience than it was before and you know meeting new people with similar issues it was, it made it more fun…

Participation empowered athletes with something they had control over, a support network or ‘sport family’, and new goals to work toward. Participants had fulfilled their personal needs for autonomy and belongingness, allowing other elements, such as challenge and mastery, to be introduced into the narrative. For each of these women, their development in disability sport led to a major transition in the way they viewed themselves both as athletes and as people with disabilities. Internalization of the values and beliefs they learned or developed through disability sport (e.g., self-confidence, openness, acceptance) transcended into the motivations that frame their everyday lives; thus, participation in disability sport created an avenue for more fruitful social participation. These women developed a sense of pride in themselves, their sport, and
their disability, which translated into a desire to inspire others and create awareness through their own disability sport participation and involvement in disability awareness initiatives.

**From ordinary to extraordinary.** Four of the life histories drew on a narrative type described as ‘from ordinary to extraordinary’. The participants who told these stories were all men with congenital physical disabilities or impairments acquired early in life (i.e., before age 10). After getting involved in competitive disability sport, the men who developed a ‘from ordinary to extraordinary’ story framed their stories of quality through a performance narrative. The traditional performance narrative encompasses a unidimensional and self-oriented focus on winning, competition, and gaining social esteem (Douglas & Carless, 2006). The story told by these participants can be described as follows: “I used to participate so that I could have fun and fit in, but now it’s because I know I can be one of the best – disability sport has become my life’s purpose, and shown me that anything is possible”. For example, Zack describes his development in disability sport:

So when I started, I was, I was just a kid… I wanted to be like everybody else, as did my parents. So they threw me in sport, because that’s what everybody’s kid did, and they wanted me to be active… I felt, quote-unquote, normal. Because I was being active, I was, I was doing something, I was performing at a high level, I was doing something that not everybody else could do. And so there is a little bit of that too, right? It’s like I can do this and not everybody can… It’s awesome. It’s freeing. Like I don’t know about you, but when I would play [disability sport], everything else would disappear… all my worries, all my fears, all my thoughts just disappeared and became about [disability sport], and I was free, and I was happy… So as I got older, I realized that sport played, in my formative years, I have sport to thank for that for me, and sport really shaped my, my mindset and my view of the world because I don’t see myself any differently from, like I don’t see myself any different from you… So that was, that was my motivation for sport in particular as I got older, because I realized it would serve me later in life.
In the narrative ‘from ordinary to extraordinary’, early disability sport involvement (e.g., ages 6-12) was facilitated by the notion of leading an ‘ordinary’ childhood. Parents played a key role in creating access to participants’ first experiences in disability sport, allowing them to participate in a variety of activities with the goal of developing ‘normal’ physical and social skills. As children, participants were motivated to participate so that they could have fun and fit in with the other kids. At this point in the narrative, participation offered opportunities for belongingness and engagement. Participants enjoyed making connections with similar others (i.e., people with disabilities) and simultaneously feeling like an ordinary (able-bodied) kid. Alternatively, the experience of being engaged in disability sport activities was described as liberating and freeing; a chance to forget that disability even exists. A turning point occurred during adolescence (e.g., ages 12-16), when the young athletes, whose frame of reference for elite sport was limited to the able-bodied, were recognized for their skill and presented with an opportunity to compete at a higher level. Accompanying the realization that an elite career in disability sport was possible, participants described newfound experiences of challenge and mastery. The development of confidence and expertise appeared particularly important for generating motivation and heightened performance goals, which were often centered around winning and status. As Leo describes:

Once I started keeping with it, I started getting better and it just kind of enhanced those skills even more like, as I would get better at workouts I would have more confidence in myself which helped me push through those tough work outs…competing against able-bodied athletes I was always just trying to beat them, and that’s kind of what pushed me to get better it’s just trying to be the best.

From this point forward, the participants’ steady upward progress was fashioned around a
single axis: disability sport performance. As the athletes continued to progress, the ultimate dream became a quest to be the best and achieve national representation.

Despite demonstrating a passion for disability sport that persisted from childhood involvement to the elite level, the meaning of participation for these individuals changed alongside their transition to more competitive disability sport involvement. Early on, quality disability sport experiences allowed the athlete to feel ‘normal’ – participating in disability sport meant fitting in, making friends, and doing what the other children were doing. Access to new challenges and competition, the experience of mastery, and recognition or support from a higher authority engendered a personal stake in disability sport performance. At this stage, participation afforded athletes with a sense of purpose (e.g., representing Canada on the international stage) and a strong athletic identity. Competition (and the right to compete) was vitally important: Participation in disability sport meant more than simply playing for fun, it meant proving oneself as a superior athlete. Moving beyond the ‘ordinary’, participation in disability sport enabled an “anything is possible” approach to life.

**Holding on.** Three of the life histories exemplified a narrative type termed ‘holding on’. The participants who told this story were one woman and two men with physical disabilities that were acquired during adolescence or early adulthood (i.e., ages 15-25). The ‘holding on’ narrative can be summarized as follows: “Yesterday I was an able-bodied athlete, today I am an athlete with a disability, but tomorrow I will simply be an athlete”. This narrative type is based on the original restitution narrative by Frank (1995), which has been translated into the lives of men with spinal cord injuries by Smith and Sparkes (2005). In the sport context, this narrative intersects with a performance
narrative (Douglas & Carless, 2006) such that the participants held onto their identities as high performance athletes – framing their lives around sport, competition, and winning – as a means of recovering their able-bodied identity or self after acquiring a disability. For example, Morley describes his return to sport post-injury:

I didn’t wanna give up on it. Um there were a lot of factors that were kind of playing against me um getting back into it, and I just, I wasn’t done with it. I wasn’t able to um you know, I didn’t leave [sport] on my own terms obviously, it was kind of taken away from me, and so I didn’t want to allow that to happen ‘cause the enjoyment that I was getting out of [sport], I hadn’t really, I didn’t really see an end to it yet and so I wanted to do whatever I could to try and get back into it… At this stage in the game my sights are definitely set on the Paralympics in Rio, and so that’s kind of where all my focus is going right now um but it’s [the Olympic team is] definitely in the back of my mind… the big question is whether or not my body can handle the training loads that the able bodied team is doing um but again that comes back to me, right now, making sure that I’m doing the best job that I can um so that I can prepare myself for what they’re doing, you know, in a year from now.

Participants in the narrative ‘holding on’ were constantly in pursuit of a higher goal despite facing inevitable setbacks over time. As aspiring able-bodied athletes throughout adolescence and early adulthood (e.g., ages 14-24), these participants were self-oriented, highly motivated, and focused on personal goals. During this time, participants expressed strong ties to their athletic identities and craved physical challenge; they felt autonomous, focused, confident, and skilled in the able-bodied sport domain. Each of these athletes sustained an injury that resulted in a physical disability, creating a common crisis in the plotline of the narrative (ages 15-25). Participants responded to initial personal doubts with an unwavering faith in their athletic identity and began participating in disability sport soon after injury (within six months). During his time in rehabilitation, Roscoe stated, “I was introduced to so many different things and I
wanted to do all of them...I was like, “I need to be competitive” – I was trying to figure out which one I could be a Paralympian in.” Some participants returned to an adapted version of their former sport, while others found a new disability sport in which they could excel. An extensive degree of personal autonomy was important for encouraging disability sport participation, empowering athletes to capitalize on opportunities and create their own space for success. Participants also described experiences of engagement (i.e., something to focus on, a feeling of freedom) and challenge (i.e., being pushed outside one’s comfort zone), which were attributed to ongoing mastery (i.e., enhanced confidence and physical skill) in disability sport. For example, Roscoe went on to say:

I think [disability sport] now is a huge part [of my life], ‘cause it’s like helped me become more independent and satisfied with something, and like it’s given me goals, like I used to have. Like it’s interesting looking back, I’m using [disability sport] now to kind of get back the person I was before… Like I really want to get on the Canadian team and like, be like, good at sport again, you know, like I used to.

Nonetheless, the path to sustained participation and performance was not linear; there were several ‘ups and downs’ in the quantity and quality of participation post-injury, corresponding to the need for continued medical care (e.g., surgeries, prosthetics) whilst training or simply finding the right fit with a new disability sport.

Considering the worth these athletes had attributed to their physical bodies pre-injury, participants viewed their participation in high performance disability sport as a means of recovering the identity they had formed as an able-bodied person. The participants who drew on this narrative used disability sport participation as an aid in their recovery and rehabilitation, working towards the most functional (or able) body possible. They expressed a desire to prove to society that they could continue to be high
performance athletes, despite their disabilities. While the meaning of their participation revolved around identity and performance, so did the notion of belonging. Within several of the other narratives, belongingness was a key element of quality sport experiences, conceptualized in terms of interpersonal connections and social acceptance. In contrast, participants in the ‘holding on’ narrative described what it means to belong as a function of their physical competence, placing little value on the social aspects of their disability sport participation. In the words of Brittany: “It was nothing to do with anyone else on the team at all…I just felt like I’m the weakest link here, I don’t deserve to be here on merit.”

**Letting go.** One of the life histories stood alone, representing a narrative type named ‘letting go’. Tom was an older retired man who had acquired a physical disability in his 60s. While the ‘from ordinary to extraordinary’ and ‘holding on’ narratives were framed around performance, the stories Tom told about his experiences in sport reflected the antithesis of a performance narrative (Douglas & Carless, 2006). Actively resisting opportunities for competitive involvement in disability sport, Tom’s narrative can be summarized as: “For me, disability sport is about more than competition; it’s about having fun, letting loose, and developing the tools to lead a successful life”. For example, Tom describes the nature of his participation in disability sport:

I just try to participate. But I know there’s one or two, one chap in particular that would rather see me on the provincial team, but honestly, that’s not my thing right now…I don’t want to get into performance because I’ve been there… and I’ve done what I want to do. I want to enjoy [disability sport], that’s the difficulty. That’s I guess the one, if there’s a negative about it, that’s the one negative. I don’t want to get involved with a performance sport or yah…I just enjoy [disability sport]. That’s the element that’s really missing when there are so few people and when you are being coached by a group of coaches that want to perform, it’s because they want to form the provincial team and go to the
nationals, so it’s that, that feeling of, of competition all the time. Competing for the wrong reasons.

As an able-bodied youth and young adult (i.e., ages 10-30), Tom was heavily involved in many recreational and competitive sport activities. Into adulthood (i.e., ages 30-50), Tom shifted his focus toward building a career and a family. Consequently, his sport involvement dwindled. In his 60s, Tom experienced a spinal cord injury. Following rehabilitation, he was introduced to disability sport through a provincial organization that supports people with disabilities. He continued to participate in disability sport once a week for recreational and social purposes – refusing invitations to compete at a higher level. Tom also became heavily involved in his community; for example, working with several disability-focused groups and organizations. Challenge and mastery played a key role in shaping the meaning that Tom attributed to his participation in sport and disability sport. According to Tom, “the most important characteristic of success is to develop a sense of confidence… [and] sports has been a big, big part of that for me…it’s a very, very important part of forming your character and success in the future.” Additional elements were highlighted specifically in relation to his experiences in disability sport. For example, Tom described engagement as a “positive high” that accompanied the satisfaction of self-improvement and performing well. That being said, Tom believed that there was an over-emphasis on performance in contemporary disability sport; he claimed that fun and enjoyment were the “missing links” for people with disabilities. Tom preferred opportunities to have fun and “let loose” while working on personal goals, without the pressure of formal competition. His involvement in disability sport also encompassed belongingness, allowing opportunities for participation alongside people with and without disabilities. For Tom, participation meant more than competition or
performance; it empowered him with the tools to lead a successful life and contribute back to the community, all while enjoying himself.

**Embracing change.** Seven of the life histories drew on a narrative type described as ‘embracing change’. The participants who told this story were four men and two women with disabilities acquired early in adulthood (e.g., ages 18-30), primarily from spinal cord injuries. ‘Embracing change’ was informed by two existing sport and disability narratives: discovery and quest, respectively. In a discovery narrative, sport is just one aspect of a complex and multifaceted life (Douglas & Carless, 2006).

Alternatively, individuals who structure their lives around a quest narrative “accept impairment and seek to use it” (Smith & Sparkes, 2005, p. 1099), guided by the belief that there is something to be gained from the experience (Frank, 1995). Through their participation in disability sport, participants sought to discover themselves and the world around them in their ‘new’ lives post-injury. ‘Embracing change’ can be summarized as follows: “Learning to live with a disability, participation in disability sport has provided a vehicle for exploration and discovery. Through disability sport, I am able to take the road less travelled – creating a unique and fulfilling path in life.” For example, Fred reflects on why he participates in disability sport:

There are so many benefits that came from my sports, I mean…obviously the health and physical stuff, but the people I met and the travelling I got to do kind of developed me that way. Something else that I really recognized about my sports too, umm when I was, I have go back a little, there was a year in there too that, what year was that? When I went and did a grad degree… So kind of through that, it taught me to recognize too, why I was into sport. Takes me back to the question of what were the benefits. One thing that I noticed with myself, and through the research that I did, was in a lot of ways, I personally, and a lot of other people who are involved in parasport, I was doing it in a lot of ways to beat my disability. Just to kind of show myself and show other people that just because I was sitting in a chair, didn’t mean I couldn’t go out and go hard at it and
accomplish things and be a world class athlete.

All of the participants described a physically active childhood, steeped in both formal and informal opportunities for sport involvement. With the autonomy and relevant supports to move within and between sport activities, participants described *belongingness* as the primary motivator of able-bodied sport participation (i.e., enjoying time spent with friends). For these participants, sport was never an all-encompassing or unilateral dimension of their lives; it was but one of many moving parts. The most significant decline in ‘embracing change’ occurred when the participants were unexpectedly faced with the transition to life with a disability (ages 18-30). During rehabilitation, participants were introduced to disability sport through peer mentors or ‘have-a-go’ days (~3-12 months post-injury). Within 6 to 24 months of their injury, all participants were regularly participating in disability sport with the continued support of both able-bodied (e.g., family, friends) and disabled communities (e.g., teammates, mentors).

A combination of factors contributed to the progress of the narrative and the quality of participants’ experiences in disability sport. First, participants had the *autonomy* to choose and sample different disability sport activities until they found “the right fit,” as Carly put it. In doing so, participants were able to connect with and learn from other people with disabilities in a variety of contexts. Furthermore, participants were exposed to opportunities to participate alongside able-bodied friends and family, providing a sense of normalcy and healing. These diverse experiences in disability sport offered varying dimensions of *belongingness*. Finding “the right fit” often meant finding an activity that was intrinsically rewarding and produced enjoyment (i.e., *engagement*),
provided physical and psychological challenge, and allowed opportunities for mastery and self-improvement. Some participants preferred recreational participation, while others sought higher levels of competition. Regardless, participants strove to balance their participation among a myriad of life domains – from education and career, to family and friends. Through disability sport, these athletes were able to prove to themselves and others that they don’t have to “blend in with all the wheelchairs,” as stated by Henry. Their identities were shaped not only by who they were prior to acquiring a disability, but by the potential they saw in the life they were living with impairment (e.g., a means self-validation and reinvention). Participants used their participation in disability sport to explore the complexity of the physical, psychological, and social dimensions they experienced in their lives post-injury, and shape who they wanted to be moving forward.

**Meta-theme: Feeling equal and valued.** The need to feel equal and valued reflected a common theme influencing the quality of athletes’ participation in disability sport. All of the participants possessed strong athletic identities and desired to be taken seriously in their status as an athlete. For example, Evan expressed frustration with a disability sport league that would not allow formal competition: “It was just what people forget is yes we may be disabled but we still want to compete…like we want to actually play [disability sport] and keep score and not be like ‘good try’ and it’s a tie.” While some participants did not want to be seen as ‘heroes’ for taking part in an activity that able-bodied people may take for granted, other participants were strongly motivated to reach their physical potential. Being viewed as legitimate athletes meant that disability sport participation was an ordinary aspect of participants’ lives – as a hobby, career, or anything in between. Disability sport produced a ‘level playing field’ for many
participants; they felt like valued members of a community that not only encompassed, but extended beyond their disability and athletic identity. According to Brittany, a professional athlete and Paralympian, “the athlete needs to feel that they’re valued as a person beyond their performance” in an ideal sport environment. When feelings of equality and value occurred along with the experiential elements of participation, participants felt that the overall quality of their participation experiences were enhanced.

3.6 Discussion

Through narrative inquiry, the unique aim of this paper was to explore the meanings that people with physical disabilities attribute to the quality of their participation in disability sport throughout the life-course. This study advances theoretical understandings of participation in disability sport by honing in on the subjective or experiential aspects of participation that make an activity feel valuable or meaningful. A timeline approach to data collection and analysis further enabled a perspective on participation that temporally reflected participants’ experiences, providing more than simply a “snapshot” of what quality participation meant to participants at one point in time. These findings both support and extend existing conceptualizations of participation (e.g., Hammel et al., 2008; Martin Ginis et al., 2017), while building on the sparse body of literature concerned with disability sport participation (e.g., Shirazipour et al., 2017).

The resulting narrative types offer support for the six experiential elements of participation (i.e., autonomy, belongingness, challenge, engagement, mastery, and meaning) identified through a review of the participation literature (see Martin Ginis et al., 2017). Several of these elements have also been supported within the few studies that have sought to explore the physical activity and sport experiences of people with physical
disabilities (e.g., Day & Wadey, 2016; Shirazipour et al., 2017; Turnnidge et al., 2012). However, extending the research, we also propose that for researchers to understand the complexity of quality we should move away from the essentialist and ontologically flawed quest to answer ‘what is quality’ to generative questions like ‘what can quality do and become over time’. As part of this, and without forgetting the pre-discursive effects of quality, the use of a narrative approach helps enable a perspective on participation that was inherently temporal in nature – a dimension that narrative research can uniquely capture given that stories not only represent human experiences in and through time, but also show how quality is developed in sport over time. It was revealed that the presence of these elements was not consistent, static, or discrete (i.e., not all elements were identified in each narrative type). The existence or importance of each element fluctuated over time and in response to different contexts. Consistent with the findings of Hammel et al. (2008), there were individual differences in the way each element was experienced and how important each element was for contributing to quality experiences in disability sport. The general sentiment among participants was that quality participation means “finding the right fit” – that is, the activity that suits their needs or interests best (e.g., someone who values the social aspect but dislikes the competitive pressure of sport participation may prefer to participate in a recreational team sport league). Finally, experiential aspects that were able to produce a feeling of equality and value within the disability sport community (or more broadly) were amplified as important contributors to quality participation (e.g., fostering respect and dignity; Hammel et al., 2008) – thus, reinforcing the capacity for social justice that full and effective participation has to offer.

Further extending the participation literature, the meanings that participants
attributed to each of the experiential elements were variable and different across the narrative types. Narratives represent and constitute people’s experiences and realities, thus providing a medium for action (Frank, 2010; Smith, 2015). In terms of understanding participation, the actions that participants took in working towards quality disability sport experiences were often shaped by the specific meanings associated with each narrative type. That is, what narratives do for people is help shape what quality means to them. In doing this, each narrative type helps constitute a distinct understanding of the elements or themes that comprise quality. For example, belongingness was conceptualized differently within each of the three central sport narratives originally represented by Douglas and Carless (2006). Belongingness meant social status in the performance narrative, social acceptance in the relational narrative, and a sense of community in the discovery narrative. Athletes who drew on a performance narrative thus used physical competence and social comparison to achieve belongingness; alternatively, athletes who fell within relational or discovery narratives experienced belongingness as a product of the interpersonal relations fostered within disability sport. As such, future work should not reduce belongingness – or other themes like autonomy – to a single understanding, but should rather appreciate and capture the different understandings associated with quality participation.

More broadly speaking, characteristics such as gender and disability type may have predisposed individuals to a particular narrative type. These differences have been supported in other areas of the literature, including physical activity initiation and maintenance among men and women with spinal cord injuries (Smith, Papathomas, Martin Ginis, & Latimer-Cheung, 2013) and disability self-concept among individuals
with congenital and acquired disabilities (Bogart, 2014). In terms of representing and facilitating quality disability sport experiences, promotional materials for disability sport programs, and the programs themselves, may be more effective when targeted to particular demographic groups. Moving forward, we can draw on existing sport and disability narratives to better understand the meanings of quality and participation, and the impact of these narratives on social functioning.

The dominant discourse in disability sport is shaped by the notion of a “supercrip” – someone who overcomes impairment to achieve unlikely success (Silva & Howe, 2012). The supercrip narrative reinforces the view of disability held by the medical model; specifically, the view that disability is a personal tragedy that needs to be rectified (Goodley, 2016). The narrative types ‘from ordinary to extraordinary’ and ‘holding on’ were shaped primarily by a performance narrative (Douglas & Carless, 2006), in which participation offered a sense of legitimacy and purpose derived from one’s ability to succeed and objectively perform in a (para)sport context. Performance was perceived as an individual responsibility – proving oneself to others as either “normal” or “superior” in spite of impairment. As such, the performance narrative reinforces both the supercrip identity and a medicalized view of impairment. While participants viewed their participation as socially progressive, these narratives may actually exclude or marginalize individuals who do not identify with the supercrip concept (Smith et al., 2016). Consequently, social oppression remained largely unchallenged. By resisting the performance narrative, the narrative type ‘letting go’ exemplified feelings of exclusion and mounting frustration with performance-driven disability sport programming.

Countering the performance narrative, athletes who drew on a relational narrative
told stories that revolved around other people (Douglas & Carless, 2006). By emphasizing interpersonal relations and dependencies, the relational narrative supports the view that disability is socially constructed and structural barriers within society form the root cause of disability (i.e., the social model of disability; Oliver, 1990). As demonstrated within ‘a Cinderella story’, the relational narrative was typically associated with poorer quality sport experiences and reduced motivation to participate, thus drawing attention to the negative implications of oppression within participants’ participation. Embedding disability within social relationships or structures – and not the individual – informed a perspective on disability that recognized social oppression in disability sport contexts (Smith & Perrier, 2014). Although social oppression was recognized, it was not challenged until participants drew on a discovery narrative. ‘A Cinderella story’ and ‘embracing change’ were structured around a discovery narrative (Douglas & Carless, 2006), which offered a balanced and multi-dimensional alternative to the performance and relational narratives. Narratives of discovery were not about overcoming disability; rather, they were about living with disability. By viewing impairment as an integral and unchanging facet of one’s identity, these stories represent counter-narratives to the more dominant discourse surrounding disability and disability sport. By opposing the medical view (i.e., disability is an individual problem) and drawing on the social model (i.e., disability is socially constructed), these narratives informed a critical and complex perspective on disability.

The narrative types ‘a Cinderella story’ and ‘embracing change’ support a social-relational model, in which disability is understood though the relational practices (i.e., bodily reality, social restrictions, cultural discourse) that shape experience (Smith &
Perrier, 2014). These stories affirm the complex array of factors that influence disabled identities and empower disability sport athletes to resist oppression in its many forms, beyond individual responsibility (Smith et al., 2016). Discovery narratives also provide support for a human rights model – directly addressing the call to action within the United Nations (2006) Convention on the Rights of Persons with Disabilities. By positioning people with disabilities as subject to the disabling practices of society, the human rights perspective advocates for the facilitation of fundamental human freedoms (e.g., full participation in society, including sport; Townsend, Smith, & Cushion, 2016).

As a whole, the narrative types presented within this paper have important implications for understanding discourse within disability sport culture, and promoting alternative ways of thinking about disability sport participation through a social justice lens.

In practical terms, narratives of disability sport participation offer unique perspectives on athlete development and what it means for athletes to participate. Narratives that challenge or expand the dominant discourse may appeal to a broader range of people than narratives that reinforce the prevailing school of thought, thus supporting participation beyond “superhuman” aspirations (Silva & Howe, 2012). With the aim of getting more people physically active or engaged in disability sport, for example, these narratives could be used by public health agencies or disability sport organizations to create messages or campaigns that promote a holistic view of participation. These messages may also be an important medium for raising awareness, reducing stigma, and promoting inclusivity among the general population (e.g., Taube, Blinde, & Greer, 1999). Furthermore, current athletes may be more likely to sustain participation if practitioners (e.g., coaches, instructors) are able to foster elements that
support feelings of equality and value in a contextually-appropriate manner. By expanding the narrative repertoire available for people with disabilities, as well as the individuals and organizations that support them, we may address both the quantity and quality of participation in disability sport.

That being said, we must acknowledge some important limitations and their implications for the interpretation of this work. First, these narratives are not complete – the trajectory and experiences of participation for each of these participants continued beyond the time of the interview. Relationally speaking, future outcomes are impossible to predict and may not align with the current findings. Furthermore, the vast majority of people who participated in this study had experienced what they perceived to be ideal participation in sport; thus, by retrospectively looking back on their participation they may have discussed their lives in relation to disability sport through “rose-coloured” glasses. At a broader social level, the consequences of each narrative were rarely viewed in a negative light by the participants who drew on those narratives. Consequently, it is important to stress that we are not prescribing a particular way of thinking about disability sport participation; rather, we are expanding the menu of narrative resources from which past, present and future athletes may choose (e.g., Smith et al., 2016). From a human rights perspective, many athletes may be unaware of the extent of ableism that exists in disability sport. Promoting alternative participation narratives may build awareness and challenge oppression with the aim of achieving full and effective participation in sport (and society) for all.

In conclusion, this paper explored the disability sport participation narratives of athletes with physical disabilities, both supporting and extending existing
conceptualizations of ‘full and effective’ participation. It has shown that diverse meanings of participation lead to different ways of achieving quality in disability sport, while elements contributing to quality disability sport experiences are also varied, dynamic, and fluid over time. Considering these findings, we would like to open up avenues for further discourse on the topic of disability sport participation. Generally speaking, more research is needed to broaden understandings of athletes’ experiences in disability sport, and how these experiences are situated within the broader context of participation and social justice. Provided that the participants interviewed for this study largely conformed to the traditions and values of contemporary Western culture, researchers may wish to explore more culturally diverse representations of disability sport participation. The gendered nature of participation narratives or differences based on disability type and self-concept also represent fruitful avenues for future research. Throughout such investigations, we suggest that researchers move away from the question of ‘what is quality’ to explore more generative questions, like ‘what can quality do for athletes with disabilities’ and ‘how might quality be developed over time’.
3.7 References


Chapter 4
Athletes’ Perceptions of Effective Disability Sport Coaching Across Development


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4.1 The Fit of Manuscript 2 within the Dissertation

Manuscript 2 falls within the ‘knowledge inquiry’ stage of the KTA framework. This study examined athletes with physical disabilities’ perceptions of effective coaching in disability sport throughout development. These findings contribute towards the overall purpose of the dissertation by establishing effective practices of disability sport coaches across developmental contexts. This knowledge is important for understanding how coaches shape the quality of athletes’ experiences and participation in disability sport, and when paired with Manuscript 1, sets the stage for further exploration of quality disability sport participation and disability sport coaching effectiveness in Manuscript 3. When synthesized alongside other relevant sources of knowledge, including Manuscripts 1 and 3, this knowledge also contributed towards the development of a knowledge product (i.e., learning tool) for disability sport coaches presented in Manuscript 4.
4.2 Abstract

The purpose of this study was to explore athletes’ perceptions of how coaches shaped their experiences in disability sport throughout development. As part of a larger study, athletes with physical disabilities ($N = 21$) participated in life history interviews. Participants outlined their sport history and responded to questions targeting the roles that coaches played in their development, which laid the foundation for broader conversations about effective disability sport coaching. Using thematic analysis, patterns in coach knowledge, beliefs, and behaviours were captured in five themes. Three themes were discussed in relation to positive experiences in disability sport, labelled consideration, collaboration, and professionalism. The remaining themes were related to negative disability sport experiences, including prejudiced coaching and passive or toxic coaching. Contextual differences in how themes can be balanced to create quality experiences for athletes across development were also discussed. The findings of this work offer support for Côté and Gilbert’s (2009) definition of coaching effectiveness, while revealing nuances specific to the disability sport context. Practical recommendations for disability sport coaches include shifting coach training and education beyond specific knowledge of disabilities to interpersonal skills that assist coaches in collaborating with athletes, and tailoring resources for disability sport coaches to the context.
4.3 Introduction

Published research on the topic of disability sport coaching has been largely justified under the nascent claim that \textit{we do not know enough} about coaches of sport for individuals with disabilities (i.e., disability sport; e.g., Cregan, Bloom, & Reid, 2007; McMaster, Culver, & Werthner, 2012; Tawse, Bloom, Sabiston, & Reid, 2012). This argument comes in spite of the extensive body of research that exists to examine, understand, and evaluate the roles and influence of coaches in other settings (e.g., Côté & Gilbert, 2009; Gilbert & Trudel, 2004). Underlying this claim is the notion that coaches assume unique roles and responsibilities in disability sport. In fact, coaches of athletes with disabilities employ many of the same skills as coaches of able-bodied athletes, in addition to those roles and responsibilities that are specific to the disability sport setting (e.g., ensuring accessible facilities and transportation; Cregan et al., 2007).

Although the body of literature focused on disability sport coaches is growing, few researchers in this area have engaged their work with the field of disability studies (Townsend, Smith, & Cushion, 2016). Disability scholars suggest that how coaches “understand disability and apply it to the coaching field will be influenced, either knowingly or unknowingly, by the models of disability that capture how disability is understood in society” (Townsend et al., 2016, p. 81). Thus, disability discourse is reason enough for researchers to consider disability sport a distinct context for the study of coaches. By situating coaching research in the field of disability studies, the voices of athletes with disabilities may be highlighted as a core feature of what it means to coach effectively in disability sport (e.g., Culver & Werthner, 2018).
Coaching effectiveness. Generally speaking, coaches are recognized as important social agents in the sport environment. In able-bodied sport settings, decades of research document the importance of the coach-athlete relationship and the resulting impact on athletes’ experiences and outcomes (see Côté & Gilbert, 2009; Gilbert & Trudel, 2004; Horn, 2008 for reviews). Hundreds of studies have investigated the behaviours, roles, and influences of expert, successful, experienced, elite, and great coaches (e.g., Alexander, 2017; Becker, 2009; Cregan et al., 2007; Debanne & Fontayne, 2009); however, Côté and Gilbert (2009) were the first to propose a comprehensive definition of coaching effectiveness. They defined coaching effectiveness as “the consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes’ competence, confidence, connection, and character in specific coaching contexts” (p. 316). Four postulates underpin this definition: (a) in any context, effective coaches integrate professional, interpersonal, and intrapersonal knowledge; (b) in any context, effective coaches develop athletes’ competence, confidence, connection, and character; (c) the composition of professional, interpersonal, and intrapersonal knowledge varies according to the context; and (d) expert coaches demonstrate coaching effectiveness on a consistent basis (Côté & Gilbert, 2009). The definition and its underlying postulates integrate three components of existing conceptual models for coaching, including coaches’ knowledge (e.g., Schempp, McCullick, & Mason, 2006), athletes’ outcomes (e.g., Horn, 2008), and the coaching context (e.g., Lyle, 2002). Although disability sport may be recognized as a unique context for the study of coaches, coaching effectiveness may serve as a useful template to guide research with disability sport coaches.

Coaches’ knowledge and behaviours. Among the literature focused on disability
sport coaches, perhaps the most notable foci include coaches’ knowledge, learning, and development (e.g., Cregan et al., 2007; Duarte & Culver, 2014; McMaster et al., 2012). Three types of knowledge are defined in relation to coaching effectiveness: professional (i.e., sport-specific, pedagogical), interpersonal (i.e., relationships with individuals and groups), and intrapersonal (i.e., self-awareness, introspection, reflection). Several studies have shown that disability sport coaches are more likely to have sport-specific (i.e., professional) knowledge that stems from being or coaching an able-bodied athlete, as opposed to either general or sport-specific knowledge of disability (Cregan et al., 2007; DePauw & Gavron, 1991). While new coaches often lack experience with disability, opportunities to develop their professional knowledge of disability and disability sport are scant, both formally (e.g., certification programs) and non-formally (e.g., conferences; McMaster et al., 2012). Limited experience with disability and few opportunities to develop professional knowledge may hinder coaches’ ability to understand and reflect, thus restricting intrapersonal behaviour. Among the few resources available for disability sport coach development, professional skills are often the focus – despite the importance of both intrapersonal (e.g., Taylor, Werthner, Culver, & Callary, 2015) and interpersonal (e.g., Banack, Sabiston, & Bloom, 2011) behaviours.

**Athletes’ experiences and outcomes.** Of course, an understanding of coaches’ knowledge, learning, and development necessitates a focus on what coaching practices are best suited to support positive athlete experiences and outcomes. The second component of the coaching effectiveness definition – outcomes – is grounded in the youth development literature (i.e., the 4 C’s: competence, confidence, connection, and character; see Côté, Bruner, Strachan, Erickson, & Fraser-Thomas, 2010). While other
conceptualizations of effective coaching (e.g., Horn, 2008) describe broad outcomes, such as performance (e.g., win-loss percentages) or positive psychological responses (e.g., sport enjoyment), Côté and Gilbert (2009) argue that the 4 Cs provide more specific, yet comprehensive ways of understanding athletes’ outcomes in sport. In disability sport, however, few studies have explicitly linked the coach to athletes’ outcomes.

One example of a coach behaviour that has been positively associated with athletes’ outcomes in disability sport is autonomy support. Autonomy-supportive behaviours have been linked to improvements in Paralympic athletes’ motivation (Banack et al., 2011) and performance (Cheon, Reeve, Lee, & Lee, 2015). Elite disability sport coaches also perceive themselves as playing an important role in athlete development (Tawse et al., 2012) and group cohesion (Falcão, Bloom, & Loughead, 2015). Beyond explicit outcomes, disability sport coaches also mold athletes’ experiences in disability sport (Martin & Whalen, 2014; Shirazipour et al., 2017; Turnnidge, Vierimaa, & Côté, 2012). According to Evans and colleagues (2018) quality disability sport experiences are derived from the satisfaction of one or more of an athlete’s values or needs, spanning six elements (i.e., autonomy, belongingness, challenge, engagement, mastery, and meaning). Evans and colleagues identified 25 conditions that act as precursors to quality disability sport experiences, including five conditions that apply directly to the coach: supporting autonomy, developing roles, tracking athlete improvement, interpersonal skills, and sport-specific knowledge. Coaches may also influence other conditions that promote quality disability sport experiences, including accessibility and equipment, the group environment, and sport-related attitudes (Evans et
Thus, while we have preliminary evidence to indicate that specific coach knowledge and behaviours influence athletes’ experiences and outcomes in disability sport, there remains a need to better understand what athletes want from coaches to optimize their experiences and outcomes over time.

**The context.** The third and final component of the coaching effectiveness definition refers to the context in which the coach operates. Within disability sport, there are a variety of contexts worth consideration. At the most basic level, competitive level can be used to define two broad categories of sport: participation (e.g., recreational clubs or social leagues) and performance (e.g., developmentally-focused or high performance programs; Lyle, 2002). Unlike most mainstream sports, disability sport programmers must often cater to participants with a wide range of experience and abilities, in addition to varied ages and gender. To date, research focused on coaches of athletes with disabilities has primarily targeted segregated, performance settings. Moreover, disability sport coaches have yet to be contrasted across developmental stages or contexts. In light of a more general need for empirical research examining disability sport coaches, researchers are thus faced with the task of exploring the relationship between coaches’ knowledge and behaviours and athletes’ experiences and outcomes across these more varied sport contexts.

**Purpose and aims.** While there is a large body of literature supporting the coaching effectiveness definition in able-bodied sport settings, we know little about what “effective coaching” means in disability sport. In particular, we know little about how coaches may influence the experiences or outcomes of the athlete, and how these interactions may be affected by the surrounding context (Martin & Whalen, 2014). As
such, the purpose of this study was to examine athletes with physical disabilities’ perceptions of how coaches shaped their experiences in disability sport over the course of development. These perspectives provided a lens through which to examine coaching effectiveness in sport for persons with disabilities. The voices of athletes with disabilities are crucial for engaging research on disability sport coaching with the field of disability studies. Here, we aimed to complement the extant literature on coaching in disability sport with this integral, yet under-investigated perspective.

4.4 Methodology and Methods

Philosophical assumptions. This study was grounded in interpretivism, which allows the researcher “to view the world through the perceptions and experiences of the participants” (Thanh & Thanh, 2015, p. 24). More specifically, the researcher draws on the views and experiences of participants to construct and interpret data in the context of the researcher’s own background and experiences (Yanow & Schwartz-Shea, 2011). As such, this research was underpinned by two main assumptions (see Sparkes & Smith, 2014): ontological relativism (i.e., reality is multiple, subjective, and mind-dependent) and epistemological constructionism (i.e., knowledge is subjective and socially constructed). Adopting this perspective meant that we sought to interpret patterns or themes within and between the individual views of our participants to extend theoretical knowledge of what it means to coach effectively in disability sport. Although we used themes to interpret participants’ responses, this perspective also led us to focus on diversity across the sample by exploring how responses differed across developmental contexts. Alongside these assumptions, we used the social relational model as a lens for understanding disability (see Townsend et al., 2016). More specifically, we explored how
impairment entered the relationship between coach and athlete by probing athletes’ experiences of both bodily and socially-constructed realities.

The data for this study was collected concurrently with the data presented by Allan, Smith, Côté, Martin Ginis and Latimer-Cheung (2018). As such, the sampling procedures and description of participants for these two studies are the same. Interviews and preliminary analyses were conducted together, before the coach-focused data were separated and subsequently subjected to a discrete analysis. A brief overview of the sampling procedures and participants is provided below, and a detailed description can be found in Allan et al. (2018) and Appendix E.

**Participants and sampling.** Participants were recruited using a combination of criterion-based purposive sampling and maximum variation sampling strategies (Sparkes & Smith, 2014), ensuring that participants shared the characteristics that made them eligible for this study while also representing a diverse range of perspectives, respectively. After obtaining ethics approval from the institution of the primary author (see Appendix A), participants were recruited from disability sport clubs and organizations across Canada via e-mail (see Appendix B). The final sample included 21 men and women (57% male) with both congenital and acquired physical disabilities (29% congenital). Participants were predominantly Caucasian (95%) and ranged in age from 19 to 73 ($M = 33.7, SD = 14.5$). On average, participants reported 20.8 years of experience participating in disability sport (range = 2 to 54 years). Participation in various types of disability sport was reported across the sample, including individual and team sports from recreational to international levels of competition. Specific disability sport activities included adapted waterskiing, boccia, hand-cycling, para-alpine, para-archery, para-
athletics, para-nordic, para-rowing, para-swimming, para-triathlon, power wheelchair hockey, sitting volleyball, sledge hockey, wheelchair basketball, wheelchair curling, and wheelchair rugby.

**Data collection.** The data for this project were collected during a two-part retrospective life history interview with each participant (Adriansen, 2012; Allan et al., 2018). The interview protocol focused broadly on the factors that shaped the quality of athletes’ experiences in disability sport over time; however, a subset of questions was developed to explore athletes’ experiences and relationships with disability sport coaches (see Appendix D for details). Correspondingly, athletes were asked about how coaches shaped the quality of their experiences in disability sport. Each life history interview consisted of two independent sessions, which were conducted in person ($n = 7$), over the phone ($n = 4$), or using an online interface (i.e., Skype; $n = 10$) depending on the geographical location of the participant.

In the first session, the interviewer and participant worked collaboratively to plot the participant’s disability sport involvement (i.e., activities) as a timeline on a large sheet of banner paper, including related contextual information (e.g., location, competitive level, coaches) and major transitions or milestones (see Adriansen, 2012). As a result, participants created a physical manifestation of their sport history, segmented into key points in time and activities that were described in detail. Each activity included on the timeline was followed-up with a specific probe designed to provide context for the research question proposed within the present study: “In a few words, how would you characterize the nature of your relationship with the coach?”

The purpose of the second session was to elicit more detailed information
concerning the disability sport activities, with a focus on the coach, while using the physical timeline to prompt discussion of specific experiences. After responding to all questions on the general interview guide, participants commented on how experiences with coaches related to the quality of their participation in disability sport. The coach-focused interview questions were organized according to the following categories: (a) activities: “How have coaches provided you with opportunities to get and/or stay involved in disability sport?”, (b) relationships: “Who would you consider to be your most influential coach and why?”, (c) environment: “How was the coach of this activity involved in shaping the disability sport environment?”, and (d) outcomes: “Tell me about the most valued elements of your experience in disability sport. What role, if any, did the coach play in generating these feelings or outcomes?” To conclude, participants were asked to reflect back on their timeline and compare and contrast different coaches across their disability sport experiences.

Data analysis. Interviews were audio-recorded and transcribed verbatim. Responses to coach-focused interview questions were separated and saved in a unique file for each participant. Additionally, responses to questions that did not explicitly target disability sport coaches were included when aspects of coaching were discussed. Contextually relevant information was recorded with each response to ensure comprehensibility within the edited transcript. An inductive thematic analysis was chosen to interpret participants’ views and experiences, using the six phases described by Braun, Clarke, and Weate (2016). Notably, an understanding of coaching effectiveness was not an original aim of this study; rather, the suitability of these findings for an examination of coaching effectiveness was discovered following the initial analysis. As such, phases one
through four reflect the inductive nature of the analysis, while an understanding of how these themes align with Côté and Gilbert’s (2009) coaching effectiveness definition influenced phases five and six.

To begin, phases one and two involved a process of familiarization (i.e., reading and re-reading the edited interview transcripts while making informal notes) and coding (i.e., systematically identifying and labelling ideas or concepts related to the research question), respectively. More specifically, the data was coded to reflect the characteristics and behaviours of participants’ coaches, as well as how these characteristics and behaviours were linked to the athlete experience. During the third phase, coded extracts were organized into candidate themes by considering patterns in the perspectives of participants regarding the characteristics and behaviours of their coach. For example, how these characteristics and behaviours were linked to the quality of athletes’ experiences (e.g., positive vs. negative) or the context.

Phases one through three were completed independently by the first author, before engaging the second and fourth authors in phases four and five. In phase four, candidate themes were reviewed, discussed, and refined. During this phase, the second and fourth authors acted as critical friends to push the first author to consider inherent biases that may colour her interpretations (e.g., her background as an able-bodied athlete) and acted as a theoretical ‘sounding board’ for the findings (Sparkes & Smith, 2014). As such, codes were iteratively revised and regrouped throughout this stage. The resulting themes were named in phase five, and the final phase involved writing up the report – led by the first author, and reviewed by all members of the research team.

**Methodological rigour.** Criteria for judging the quality of this qualitative
research were not viewed as universal or preordained in nature (see Sparkes & Smith, 2009). Aligned with ontological relativism and epistemological constructionism, a flexible list of criteria is provided as a framework for evaluation that is specific to the unique qualities of our research (Sparkes & Smith, 2014; Smith & McGannon, 2017). Drawing on the work of Kuzel and Engel (2001), we selected a list of criteria with the specific aim of ensuring that our work has both sound theoretical implications and meaningful pragmatic applications. Accordingly, researchers and practitioners may use the following list to guide their evaluation: (a) sound assumptions (i.e., are the philosophical assumptions of the research stated and consistent with the research process and/or product?), (b) quality connections (i.e., do the researchers demonstrate sensitivity to the linkage between assumptions, facts, values, interpretations, and theories?), (c) rich rigour (i.e., do the researchers sufficiently justify methodological decisions and demonstrate an understanding of what the chosen methods will produce?), (d) plausibility (i.e., are the findings plausible and consistent with existing theory), and (e) collaboration (i.e., does the inquiry involve a community of inquirers, and do the researchers account for the impact of social structures/processes?).

We aimed to ensure the quality of our work by explicitly stating our philosophical assumptions and adhering to them throughout the research process and final write-up (Kuzel & Engel, 2001). The first author maintained a reflexive journal to explore her personal biases and perceptions throughout data collection and analysis, and critical friends (the second and fourth authors) were engaged to challenge aspects of the research that did not align with the aforementioned assumptions (see Sparkes & Smith, 2014). Critical friends further acted as a “theoretical sounding board” to encourage thoughtful
linkages between our assumptions, values, and findings, as well as existing definitions and frameworks (e.g., coaching effectiveness; Sparkes & Smith, 2014, p. 182). In working towards rich rigour, we maintained an audit trail for all methodological decisions and sought to ensure that the criteria chosen to evaluate the quality of this research were met (Tracy, 2010). Moreover, as demonstrated within the discussion, the findings of our research are contextualized within existing and relevant frameworks (i.e., the findings are plausible; Kuzel & Engel, 2001). To achieve collaboration, the voices of athletes with disabilities are represented as key agents in our understanding of how coaches shaped athletes’ experiences in disability sport (Sparkes & Smith, 2014).

Participants were encouraged to reflect on the transcript from their interview to extend and clarify our interpretations of the data (Smith & McGannon, 2017). Finally, a social-relational model of disability was used as a lens through which to interpret the results (Townsend et al., 2016).

4.5 Results

Participants’ discussions of experiences and relationships with disability sport coaches throughout their development as athletes were broadly reflected within two overarching themes. The first overarching theme embodied the tendency for athletes to juxtapose their positive and negative experiences with disability sport coaches. Stemming from these experiences, differences in athletes’ perceptions of coaches’ knowledge, attitudes, and behaviours were further divided into five main themes and grouped according to their potential to either facilitate or hinder the quality of athletes’ experiences in disability sport. Providing background and nuance for these five themes, the second overarching theme revealed contextual differences related to athletes’ stage of
development and the balance of coach knowledge and behaviours that optimally supported disability sport experiences. The two overarching themes are described in detail below and summarized in Tables 1 and 2.
<table>
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<tr>
<th>Themes</th>
<th>Subthemes</th>
<th>Supporting Quotes</th>
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| **Professionalism** | 1. Knowledge of the sport and relevant disabilities  
2. Experiential knowledge and credibility  
3. Procedural knowledge and expectations | “He was so knowledgeable. He really knew his job incredibly well, you know, my athleticism went from mediocre, like literally mediocre, to exceptional in one year.” – Isabelle |
| **Effective Coaching** | 1. Believing in athletes  
2. Building a personal relationship  
3. Engaging in open two-way communication  
4. Fostering an inclusive environment  
5. Learning from others | “She was a really good influence in my life as well and I mean, being a female athlete like, she accomplished so much, was like, she could, and she saw herself in me kind of thing…she took me under her wing and kind of groomed me to become a good athlete as well.” – Joanne |
| **Consideration** | 1. Perceptions of disability and disability sport  
2. Efforts to understand and empathize  
3. Actions and reactions  
4. Thinking beyond the sport | “Understanding would be my word, so, that openness and understanding and kind of, a coach that understands where I’m coming from in terms of my own personal space, but also as an athlete.” – Nina |
| **Prejudiced Coaching** | 1. Failing to care or take disability sport seriously  
2. Favouring athletes who are ‘more abled’  
3. Lacking empathy or understanding | “And then just really hammering home the point that um like para-athletes shouldn’t be treated any differently than able bodied athletes. Like the expectations that are put on them should be the same.” – Morley |
| **Harmful Coaching** | 1. Lacking knowledge or resources  
2. Devaluing or degrading athletes | “The newer coaches are still kind of uncomfortable and…very timid. Like this one coach doesn’t really say much during the games and she lets one of the parents who was a coach last year just try to direct and she gets I almost want to say bossed around by her players a lot of the time” – Graham |
Table 2. *Contextual differences in themes related to effective disability sport coaching*

<table>
<thead>
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<th>Context</th>
<th>Objective</th>
<th>Key Theme</th>
<th>Key Points</th>
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| **Recreational:** The primary reasons for participation are leisure and learning (e.g., grassroots clubs, social leagues). | Facilitate participation | Consideration | • Create positive early sport experiences for athletes to encourage sustained participation (e.g., emphasize inclusion and fun, challenge athletes based on their goals and abilities, support independence)  
• Experiential learning and reflection build understanding and empathy; coaches are better able to anticipate athletes’ needs and create a comfortable environment for participation  
• Disability sensitivity and awareness are crucial to ensure safety and cater to the needs of a diverse group of athletes |
| **Developmental:** Any participation beyond the introductory level in which competition and the refinement of skills are key components. | Facilitate progress | Collaboration | • Developmental coaches facilitate a chain of communication between athletes, coaches, and administrators from entry into disability sport to the high-performance level  
• Small pool of athletes mean that competitive athletes may have a range of different goals and level of experience (e.g., opportunities to travel vs. winning at the highest levels) – coaches play an important role in tailoring training and opportunities accordingly  
• Reciprocal process of learning and communication is key to optimizing athletes’ skill progression, autonomy, and engagement |
| **High Performance:** National teams and international competition for athletes with the highest levels of talent and skill. | Facilitate performance | Professionalism | • Support systems in place to handle issues related to logistics and accessibility  
• Extensive knowledge of disability sport skills, strategies, and techniques  
• Familiarity with specific disabilities and relevant adaptions for disability sport (or willingness to learn)  
• Interpersonal skills can be developed on top of sport- and disability-specific knowledge |
Effective coaching in disability sport: Striking a balance or missing the mark? By juxtaposing positive and negative experiences with disability sport coaches, patterns in the characteristics and practices of effective and ineffective coaches were clear. “If you have a bad coach, then maybe you’ll never reach your potential…And if you have a really great coach, then it changes your skillset – it changes everything,” reflected Quinn, capturing the polarized nature of coaches’ influence. Three themes were considered necessary to positively influence athlete development and the quality of athletes’ experiences: (a) professionalism, (b) collaboration, and (c) consideration. Alternatively, two themes reflected the types of knowledge, attitudes, and behaviours that negatively impacted participants’ experiences and development in disability sport: (a) prejudiced coaching, and (b) passive or toxic coaching.

Striking a balance: Effective coaching in disability sport. Participants conceptualized effective disability sport coaching as the ability for coaches to foster positive athlete experiences and outcomes, which differed according to the needs and goals of each athlete, as well as their developmental context. To coach effectively, participants recognized patterns in coaches’ knowledge, beliefs, and behaviours that were grouped into three main themes. The presence of all three themes was considered important to optimize athletes’ disability sport experiences; however, the balance between each theme – for example, the types or knowledge or behaviour that should be prioritized or emphasized in different contexts – was often stressed by participants as a vital component of the coaching process. For example, in the following quote, Nina touches on significant aspects of all three themes – from traditional notions of what it means to be an “expert coach” (professionalism) to the interpersonal dimension of
coaching (collaboration) and coaches’ ability to understand and anticipate athletes’ needs (consideration):

I think it’s important to have some sort of balance there, between the person who is an expert coach and an expert at kind of bringing out the best in people, but also somebody who can be like, ‘Hey, you can’t ask them to do that’ [emphasis added].

**Professionalism.** Professionalism refers to the competence or skill expected of a coach in relation to his or her specific disability sport, and is derived from relevant knowledge and experience. The first sub-theme, *knowledge of the sport and relevant disabilities*, encompassed two broad areas of expertise: sport-specific knowledge, including physical and psychological skills and strategies, and familiarity with the disability types of participants in the pertinent disability sport. Frank summed up the views of many participants when he simply stated, “The coach has to know what he or she is talking about.” The ability to apply knowledge from other settings (e.g., able-bodied sport) in order to adapt skills and strategies for individual athletes was also considered crucial in the disability sport setting.

Athletes felt that coaches were more credible and relatable – reflecting the second subtheme, *experiential knowledge and credibility* – when they had built a foundation of sport- and disability-specific knowledge through their own experiences in sport (e.g., as an athlete or coach) or with disability (e.g., personal experience with disability or a family member’s disability). “I think it’s one thing to have a coach in the sport, but it’s another to have one who’s been in it for a long time,” discussed Roscoe. Henry reinforced this sentiment when describing his coach, a former elite athlete: “When he speaks, you listen, because of his background, and what he’s proven.”
The third and final subtheme, *procedural knowledge and expectations*, covered a range of behaviours and responsibilities necessary for translating the aforementioned sport- and disability-specific knowledge into practice. Participants discussed the importance of detailed and organized practice plans, clear and consistent standards for behaviour, as well as contextually-appropriate activities and expectations. According to Patrick, coaches have a responsibility to provide “on-court guidance and direction,” hold athletes “accountable to [their] training programs,” and “ensure [they] are progressing in the right direction.”

*Collaboration.* The second theme, collaboration, is defined as a reciprocal process of learning and development, characterized by mutually-shared beliefs, values, and expectations. Collaboration is cultivated through personal relationships or interactions with athletes and others in the disability sport environment (e.g., assistant coaches, family members). Participants felt confident and accomplished when coaches demonstrated their belief in them by dedicating time and effort to their development, recognizing accomplishments, and providing tailored feedback, encouragement, and reassurance. When coaches were willing to consider athletes’ thoughts or opinions and allowed them to take on leadership roles, athletes further described a feeling of autonomy and value within their sport participation. Brittany summed up the first sub-theme, *believing in athletes*, when she stated, “the best [coaches] are those that validate and uplift their athletes, and aim to make them competent and independent.”

To build the foundation for a collaborative learning environment, coaches developed and maintained personal relationships with athletes. Exemplifying the second subtheme, *building personal relationships*, Isabelle stated, “I think that it is really
important that the coach knows the person, like takes the time to get to know them and
takes a personal interest in them.” In doing so, coaches demonstrated care and concern
for athletes’ well-being. Consequently, athletes tended to feel more secure and
comfortable with their coach, and coaches felt more relaxed “getting up close and
personal,” as Nina explained, when addressing athletes’ needs. Participants felt that
coaches and athletes should share a mutual understanding and respect for one another, as
well as an agreement (and corresponding level of accountability) with respect to the goals
and expectations of each individual.

The third subtheme, *engaging in two-way communication*, was important for not
only developing and maintaining these relationships, but also for facilitating a reciprocal
process of learning and development. While the coach might be the expert in the sport,
the athlete is an expert in their own disability; they can adapt and problem-solve together
in order to optimize participation and performance. As Nina recommended, “Don’t try to
be an expert on every disability, just learn from the individual with the disability.”
Participants described numerous communication strategies to enhance collaboration,
including one-on-one time and varied means of communication to ensure athletes’
understanding.

*By fostering an inclusive environment*, the fourth subtheme, effective coaches
created a culture for collaboration wherein the coach facilitated opportunities for team
bonding (e.g., social events, teambuilding activities) and eased access and removed
barriers to participation (e.g., calling ahead to hotels or venues to ensure they are
accessible). Coaches also nurtured a broad network of caring and support among
individuals involved with the team (e.g., athletes, volunteers, family members). Team
culture was a crucial aspect of participation for athletes such as Anna, who explained that “if someone on the team can’t do something, all we have to do is tell [coach] and she’ll figure out a way for that person to do it.”

Collaborative coaches were also open to the idea of learning from others, the fifth and final subtheme. For example, Frank described how his coach was “so into learning from other coaches and athletes” when they went to competitions, and he also believed that his coach “learned from [him] too.”

*Consideration.* Consideration refers to the coach’s ability to anticipate, understand, and reflect on athletes’ needs and goals, as well as the effects that one’s beliefs and actions will have on athletes’ outcomes, which encompasses personal views of both sport and disability. Extending this definition, consideration also includes the coach’s ability to translate these understandings and reflections into future behaviour. Participants felt that coaches’ perceptions of disability and disability sport, the first subtheme, strongly influenced coaches’ approach to training and degree of comfort when working with disability sport athletes. Athletes expressed a desire to be treated equally to their able-bodied peers and have disability sport taken seriously in the broader sport domain. “I think I get along well with my coach because he really understands disability, and he doesn’t put my disability as an excuse for anything,” reflected Roscoe. Although disability is an integral part of the athlete and should be addressed when needed, the focus should remain on the person and their goals or reasons for participating. In the words of Joanne, coaches should “focus on what [athletes with disabilities] can do, not what they can’t do.”

One way that coaches can learn about athletes’ needs and abilities is through
efforts to understand and empathize, which represents the second subtheme. While coaches who live with a disability or have previous experience in disability sport may already possess a significant degree of understanding and relatedness among their athletes, coaches without relevant experience can attempt to deepen their understanding by trying out the sport and equipment for themselves. Alternatively, coaches may try to understand “what [athletes with disabilities] have to go through in their daily life,” as Danielle explained.

In relation to consideration, participants emphasized the importance of coaching with purpose and transparency. “The biggest thing is to stick to what you say,” stated Carly. Coaches should always be armed with a sound rationale for the decisions or plans they have made, and recognize the potential impact their actions might have on athletes. The words or actions of coaches were considered to have a profound effect on an athlete’s confidence, and participants described the best coaches as those who were both deliberate and aware of their actions and reactions, encompassing the third subtheme. In the words of Brittany: “I firmly believe, regardless of your level of coaching…[that] you as a leader, have an ability – a unique ability – to have an impact on your athletes’ life both on the court and off it as well.”

Coaches who are deliberate and thoughtful, and have the capacity to understand and empathize with athletes, are likely to make meaningful connections with athletes that support their overall development. Expanding on a previous quote, Roscoe went on to say, “[My coach] totally gets me as a person, like he understands that I’m not just about sport, like kind of school comes first, I want to get a job…he gets that aspect, and incorporates it into my plans.” Participants appreciated coaches who were capable of
thinking beyond the sport, the fourth subtheme, to understand athletes’ needs and help them develop in diverse areas of their lives.

**Missing the mark: Negative experiences with coaches in disability sport.**

Accounts of positive experiences and relationships with disability sport coaches were often contrasted with stories about coaches who were unable to support meaningful or satisfying experiences in disability sport. In Quinn’s opinion, “Coaching is not for everyone, and being that athlete where you don’t have any control…it’s just not a good place to be in.” Negative experiences with disability sport coaches were featured across two themes reflecting discriminatory attitudes and practices (i.e., prejudiced coaching), as well as a more general neglect and devaluing of athletes’ worth (i.e., passive or toxic coaching). These types of interactions with disability sport coaches left participants feeling marginalized, uncomfortable, and unchallenged in their disability sport experiences, leading to a reduced sense of accomplishment and agency over their disability sport participation.

**Prejudiced coaching.** Due to either a lack of knowledge and experience or generalized stereotypes of disability and disability sport, the prejudiced coaching theme encompasses either intentional or unintentional discrimination against athletes with disabilities. Aligning with the first subtheme, failing to care or take disability sport seriously, a few participants described experiences in which coaches either did not consider athletes with disabilities to be as capable as able-bodied athletes, or did not consider disability sport to be “on the same level” as mainstream sport. Coaches with these views often lowered their expectations of athletes and demonstrated a clear lack of effort and engagement in their athletes’ training. For example, Quinn and Brittany – both
internationally competitive athletes – each described experiences with high performance coaches who were “not present” or used their position in disability sport as a “stepping stone” toward a higher position in able-bodied sport.

In a similar vein, some participants discussed situations in which coaches favoured athletes who were ‘more abled’ than others, reflecting the second subtheme. Expressly, athletes with higher levels or function (with or without a disability) were prioritized over athletes with lower levels of function.

Finally, coaches who lacked empathy or understanding, the third subtheme, were more likely to show discomfort around athletes with disabilities, over-sympathize and subsequently undermine the independence of their athletes, and struggle to appropriately adapt skills or activities in a way that would include all athletes. As Tom explained, “They sometimes treated you as if, being in a wheelchair, they felt sorry for you…and some of them still exhibit that as if to say, ‘poor [Tom] is in a wheelchair.'”

Passive or toxic coaching. Passive or toxic coaching refers to situations in which the coach neglected or undermined athletes more generally. Some athletes felt that coaches were lacking knowledge and resources, the first subtheme, but possessed otherwise positive attitudes towards disability and disability sport. As a result, these coaches were generally ineffective when it came to developing successful practice plans and guiding or supporting athletes through various aspects of their disability sport involvement (e.g., funding, equipment, travel). “It wasn’t a good experience… [the coach] was, you know, a good teacher, but she just didn’t know what she was doing,” reflected Anna, describing her experience with a high school teacher who was new to coaching athletes with a disability.
Alternatively, some coaches possessed the relevant knowledge and experience but failed to effectively communicate with or consider the needs of their athletes. The second subtheme, *devaluing or degrading athletes*, encompassed participants’ descriptions of coaches who frequently skipped practices, appeared disengaged during practice time, used a critical or negative tone with their athletes, and ‘singled out’ or ‘put down’ athletes in front of others. As Leo described, “It was okay…but it’s still tough like mentally and physically always being told ‘Oh, you could’ve done this better’ or ‘You didn’t do this right’ or [the coach] yelling at the top of his lungs at you during practice.” In the words of Danielle, “It’s just sports to them” – inferring that some coaches failed to see the person behind the athlete.

**Contextual differences in effective disability sport coaching.** Patterns in the types of knowledge and behaviours that participants believed were optimal for coaches to support positive athlete experiences and development were reflected in the second overarching theme. Contextual differences in effective disability sport coaching were generally conceptualized along a continuum of athlete development, beginning with entry into disability sport and progressing up towards the highest levels of competition. At the front end, coaches played an important role in initiating first contact between potential athletes and disability sport. By reaching out to potential athletes, showing a personal interest and willingness to work with new athletes, and easing the transition into disability sport (e.g., assisting with equipment or transportation), coaches fostered a sense of accountability and belonging that helped to motivate participation. Three general contexts were identified along the continuum: recreational, developmental, and high performance. Although participants highlighted the need to balance effective coaching
themes (i.e., consideration, collaboration, and professionalism) across contexts, the theme considered to be prioritized or emphasized differed according to the stage of an athlete’s development (refer to Table 2). Participants also highlighted the dynamic nature of the coach-athlete relationship throughout development, meaning that what an athlete may need or want from a coach may change over time or according to the context. As Brittany explained, “I’ve been really lucky in term of the diversity of coaching that I’ve had…there’s no doubt in what I need and what I want and [I] know now that it’s a case of both circumstance and personality.”

4.6 Discussion

The purpose of this study was to examine athletes’ perceptions of how coaches shaped their experiences in disability sport throughout development. As such, the perspectives of participants in this study offered valuable insight into our understanding of coaching effectiveness in sport for persons with disabilities. By exploring the views of disability sport athletes, we sought to circumvent inherent biases in coaches’ responses while empowering the voices of persons with disabilities to reveal insight into their perception of disability sport coaches’ knowledge, attitudes, and behaviours, and how these translated into positive and negative experiences throughout development.

The findings of this study suggest that the definition of coaching effectiveness originally proposed by Côté and Gilbert (2009) can be applied in disability sport. Derived from research in able-bodied sport settings, the coaching effectiveness definition highlights the dynamic interaction between coaches’ knowledge and behaviours, athletes’ experiences and outcomes, and the coaching context (Côté & Gilbert, 2009). The themes and thematic relationships identified in this study can be mapped onto the coaching
effectiveness definition, thus extending our understanding of effective (or ineffective) coaching in disability sport. Considering these findings, effective disability sport coaching may be defined more specifically as a contextually-appropriate and balanced application of consideration, collaboration, and professionalism that facilitates positive athlete experiences and outcomes. Alternatively, ineffective disability sport coaching occurs when one or more of consideration, collaboration, and professionalism is absent or inappropriately balanced for the context, thus leading to athletes’ perceptions of negative experiences or outcomes. Below, we situate our findings in relation to key components of Côté and Gilbert’s coaching effectiveness definition, including supporting evidence and relevant issues from within the disability sport coaching literature.

First, disability sport coach knowledge and behaviours can be understood in terms of consideration (i.e., intrapersonal knowledge), collaboration (i.e., interpersonal knowledge), and professionalism (i.e., professional knowledge). While the core features of each theme align with the types of knowledge described by Côté and Gilbert (2009), sub-themes also provide important nuance specific to the disability sport context. For example, consideration encompassed perceptions of disability and disability sport and efforts to understand and empathize, which played a key role in coaches’ ability to anticipate, understand, and reflect on athletes’ needs and goals. These findings reinforce the similar yet contextualized nature of disability sport coaching (e.g., Cregan et al., 2007), while also drawing attention to key issues in disability sport coach development. Namely, coaches often lack disability-specific experience (e.g., DePauw & Gavron, 1991) and have limited opportunities for formal and nonformal learning in disability sport (McMaster et al., 2012; Tawse et al., 2012). Furthermore, coaches’ knowledge – and the
education that they receive— is often informed by a medicalized view of disability (Bush & Silk, 2012). Coaches who adhere to this perspective work to improve sport performance by “fixing” the problem posed by an athlete’s impairment, thus reinforcing ableist ideals and values (Townsend et al., 2016).

Extending beyond the types of knowledge and behaviours that make an effective disability sport coach, our results also tapped into important contextual differences. Participants considered a balance of consideration, collaboration, and professionalism important at all stages of development, and agreed that the ideal composition of coaches’ knowledge would differ according to the context. Contexts of development for disability sport were largely representative of those identified in other areas of the coaching literature (e.g., Lyle, 2002); however, they were not refined to a particular age range due to the limited number of available programs. While Côté and Gilbert (2009) do not define the optimal composition of coach knowledge for a given context, our findings suggest that the emphasis placed on each type of knowledge (and corresponding behaviours) differed according to the stage of athletes’ development. For instance, professionalism was highly valued among elite athletes due to the level of sport-specific knowledge required to optimize performance. This finding is supported by interviews with high performance coaches, which also highlight the importance of collaboration for elite athlete development (Cregan et al., 2007; Tawse et al., 2012). At the other end of the spectrum, experiential learning and reflection assisted coaches in anticipating athletes’ needs and thus creating a safe, inclusive, and comfortable environment to facilitate positive early disability sport experiences (McMaster et al., 2012).

By tailoring their application of knowledge and behaviours to a specific context or
a particular athlete, coaches may influence athletes’ experiences and outcomes in
disability sport. Côté and Gilbert (2009) suggest that effective coaches develop positive
assets within their athletes. Provided that the emphasis of this study was on athletes’
experiences in disability sport, we did not explicitly evaluate the assets or outcomes
obtained by athletes over the course of their disability sport careers. Participants
discussed both positive and negative disability sport experiences that they associated with
the conduct of their coaches in disability sport, which were often associated with
experiential elements (e.g., Martin Ginis, Evans, Mortenson, & Noreau, 2017) or specific
outcomes of their participation (e.g., Côté et al., 2010). The three themes considered to
positively influence the quality of athletes’ disability sport experiences reflected six of
the 25 conditions identified by Evans and colleagues (2018) as precursors to quality
experiences in disability sport. All six of these conditions were categorized as precursors
to quality disability sport experiences in the social environment. Specifically,
professionalism encompassed coaches’ knowledge, skill, and learning (condition 1),
collaboration included coaches’ autonomy support (condition 2), role development
(condition 4), and interpersonal skills (condition 5), and consideration involved positive
sport- and disability-related attitudes (conditions 11 and 12).

On the other hand, when coaches lacked the appropriate knowledge for a
particular context, or coached with misconceived perceptions of disability and disability
sport, athletes were more likely to describe negative experiences in disability sport. The
prejudiced and passive or toxic coaching themes were associated with a lack of
autonomy, belongingness, challenge, mastery, and engagement (see Evans et al., 2018;
Martin Ginis et al., 2017) that stemmed from feelings of marginalization and a lack of
proper support and guidance. Only one other study has explored negative coaching behaviours from the perspectives of disability sport athletes, and revealed similar findings: Athletes felt inferior and lacked trust in coaches who were manipulative or selfish, and felt dissatisfied with themselves and their coaches when the coach did not treat individuals with disabilities equally or respectfully (Alexander, 2017).

Provided that we have limited evidence to support the types of experiences and outcomes that act as hallmarks of an effective disability sport coach, and in consideration of our philosophical approach, we have not adapted the coaching effectiveness definition to include a particular set of criteria for what it means to effectively coach athletes with a disability. However, existing frameworks may be relevant. For example, Côté and Gilbert (2009) highlight the importance of having “measurable indicators that serve to identify and evaluate coaching effectiveness” (p. 312), and suggest that the 4 Cs (competence, confidence, connection, and character) provide a “descriptive, yet comprehensive understanding of athletes’ outcomes in sport” (p. 313). The 4 Cs have been well established as a model of positive athlete development (Côté et al., 2010; Côté, Turnnidge, & Evans, 2014), and may also serve as a useful framework for understanding athletes’ outcomes in disability sport. Building from the 4 Cs and considering disability sport athletes’ experiences, the work of Evans and colleagues (2018) offers another potential avenue for defining effective disability sport coaching. Developed through a rigorous protocol involving a comprehensive knowledge synthesis and stakeholder input, the Quality Parasport Participation Framework (Evans et al., 2018) suggests that quality disability sport experiences are comprised of six key elements (autonomy, belongingness, challenge, engagement, mastery, and meaning; see Martin Ginis et al., 2017). According
to Evans and colleagues (2018), continued exposure to quality disability sport experiences over time contributes to athletes’ broad subjective evaluations that their involvement in disability sport has been satisfying, enjoyable, and generates personally-meaningful outcomes (i.e., quality participation). As such, quality participation represents a framework for understanding positive athlete experiences that is grounded in the disability literature and the voices of athletes themselves.

**Implications for disability sport coach development.** Moving forward, the findings of this study, and their application to the coaching effectiveness definition, have important implications for disability sport coach development. In addition to expanding the number of resources and opportunities available for educating disability sport coaches, there is an urgent need to develop resources informed by evidence and theory (e.g., McMaster et al., 2012). By offering a more nuanced understanding of effective disability sport coaching that is grounded in the perspectives of athletes with disabilities and relevant theoretical frameworks (e.g., Côté & Gilbert, 2009; Evans et al., 2018), we hope to help lay the groundwork for impactful, research-informed interventions targeting disability sport coaches.

For instance, coach training and education could be aligned with the conditions for promoting quality disability sport experiences identified in the Quality Parasport Participation Framework to optimize athletes’ experiences and thus facilitate effective disability sport coaching (Evans et al., 2018). Formal training for coaches to acquire disability sport- and disability-specific knowledge was highlighted by participants, but the means of acquiring such knowledge extended beyond the classroom to interpersonal skills. Athletes discussed the importance of coaches who worked with them to solve
problems and adapt training to their particular needs (e.g., Turnnidge et al., 2012). As such, training coaches to improve their interpersonal skills may have a larger impact than education focused on specific skills or disabilities alone. Other behaviours that may lead to effective disability sport coaching – and thus have an important place in coach learning – include supporting athletes’ autonomy (e.g., providing options and choice; Banack et al., 2011; Cheon et al., 2015) and developing roles for athletes (e.g., providing opportunities for leadership; Shirazipour et al., 2017). Our findings also offer novel recommendations for tailoring coach training and education to the specific context within disability sport (see ‘Key Points’ in Table 2).

In order to challenge ableist assumptions and values inherent within the medical model, we also suggest that coach researchers, developers, and practitioners consider underpinning their work with alternative models of disability (see Townsend et al., 2016). For example, a social-relational model of disability may offer insight, perspective, and questions that enhance coaching effectiveness in disability sport (e.g., recognizing barriers to participation at both the individual and societal levels). By managing their own biases and those of others in the group, coaches can work to ensure that all athletes are treated equally (regardless of ability) and feel accepted in the disability sport environment (Evans et al., 2018).

**Conclusion.** From a theoretical perspective, the findings of this study may be used as a starting point from which to evaluate the coaching effectiveness definition in disability sport, as well as its relationship to other relevant frameworks (e.g., quality parasport participation, Evans et al., 2018). By examining the perspectives of athletes with disabilities, this study makes a valuable attempt to bridge the gap between research
focused on disability sport coaching and the field of disability studies. In conclusion, the results of this study offer an interpretation of coaching effectiveness that is grounded in the views and experiences of athletes with disabilities, thus offering a valuable framework for research and practice, and an essential perspective on disability sport coaching.
4.7 References


Educator, 48, 33-40.


Chapter 5

Fostering Quality Disability Sport Programs: A Collective Case Study of Model Coaches in Disability Sport


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5.1 The Fit of Manuscript 3 within the Dissertation

Manuscript 3 falls within the ‘knowledge inquiry’ stage of the KTA framework. This study provides an in-depth investigation into the role that coaches play in shaping the quality of disability sport participation via a collective case study of model disability sport programs. In doing so, these findings contribute towards the overall purpose of the dissertation by providing theoretical links between coaching effectiveness and quality participation in disability sport. As such, Manuscript 3 builds on the knowledge obtained through Manuscripts 1 and 2. Taken together, Manuscripts 1-3 provide the foundation for the development of a knowledge product (i.e., learning tool) for disability sport coaches presented in Manuscript 4.
5.2 Abstract

Considering the important yet under-investigated role of coaches in disability sport, the purpose of this study was to identify model disability sport coaches and offer an in-depth investigation into how they shaped successful programs. Model coaches were identified through nominations from athletes and administrators within Canadian disability sport organizations. Six coaches met the inclusion criteria and agreed to participate, representing individual and team sports from grassroots to international levels of competition. A collective case study was performed, with each club or team (i.e., case) representing the unit of analysis. Three sources of data were collected for each case. First, documents (e.g., coach resumes and/or certifications) were reviewed. Second, mobile interviews were performed (i.e., the lead researcher shadowed each coach while observing and asking questions). Finally, head coaches ($n = 6$), assistant coaches ($n = 1$), and their athletes ($n = 17$) participated in semi-structured follow-up interviews. The data for each case were independently thematically analyzed, and the results were then compared. Across cases, four overarching themes were identified: (a) coaching philosophy, (b) coaching style, (c) learning environment, and (d) broader vision for the program or disability sport. Each coach played a key role in the development of the program; their philosophical beliefs and vision for the team corresponded to the implementation of core values that translated into quality experiences for athletes at each thematic level. Findings are discussed in relation to relevant theoretical frameworks, thus extending our understanding of quality participation and coaching effectiveness in disability sport, while also offering practical strategies for disability sport coaches.
5.3 Introduction

Relative to coaches in mainstream sport contexts, coaches of athletes with disabilities have received limited attention in the academic literature (Martin & Whelan, 2014). Although research focused on coaches in disability sport (i.e., sport for persons with a disability) has made important theoretical and practical contributions in recent years, there remains a general need for studies of coaches in this unique context (Allan, Evans, Latimer-Cheung, & Côté, submitted; Townsend, Smith, & Cushion, 2016). Of the work that has been done, perhaps the most notable line of research examines coaches’ knowledge, learning, and development (see Duarte, Culver, Trudel, & Milistedt, 2018 for a review). Alternatively, few studies have explicitly linked coaches’ knowledge or behaviours to athletes’ experiences or outcomes in disability sport. That being said, research exploring the perspectives of athletes with physical disabilities suggests that coaches are important shapers of athletes’ disability sport experiences (Allan et al., submitted; Shirazipour, Evans, et al., 2017; Turnnidge, Vierimaa, & Côté, 2012). Thus, more research is needed to understand how coaches foster positive experiences and outcomes for athletes with disabilities.

While several conceptualizations of successful or effective coaching exist in the able-bodied sport literature, Côté and Gilbert (2009) were the first to propose a comprehensive definition of coaching effectiveness. Grounded in the perspectives of athletes with disabilities, Allan and colleagues (submitted) found support for the coaching effectiveness definition put forward by Côté and Gilbert (2009), while also providing nuance specific to the disability sport context. According to this definition, the interaction of three components results in effective (para)sport coaching: (a) coaches’ knowledge...
and behaviours, (b) athletes’ experiences and outcomes, and (c) the context (Allan et al., submitted; Côté & Gilbert, 2009). More specifically, effective disability sport coaching necessitates a balanced and contextually-appropriate application of consideration (i.e., intrapersonal behaviours), collaboration (i.e., interpersonal behaviours), and professionalism (i.e., professional behaviours) to facilitate positive (or quality) experiences and outcomes for athletes with disabilities (Allan et al., submitted).

One framework that offers insight into the relationship between coaches’ knowledge and behaviours and the quality of athletes’ experiences in disability sport is the Quality Parasport Participation Framework (Evans et al., 2018). Developed through a synthesis of existing literature and input from stakeholders, the framework centers on the concept of quality participation – an athletes’ broad subjective evaluation that his or her sport involvement is satisfying, enjoyable, and generates personally-valued outcomes. Quality participation occurs as the result of repeated exposure to quality experiences in disability sport, which refer to an athletes’ ongoing appraisals of whether or not those experiences satisfy a range of task and/or social needs. Quality experiences vary across individuals and time, and include athletes’ perceptions of the following experiential elements (see Martin Ginis, Evans, Mortenson & Noreau, 2017): autonomy (i.e., having independence, choice, or control), belongingness (i.e., a sense of belonging or acceptance in a group), challenge (i.e., feeling appropriately tested), engagement (i.e., feeling focused or motivated), mastery (i.e., experiencing achievement, competence and self-confidence), and/or meaning (i.e., contributing towards obtaining a personal or socially-meaningful goal).

Notably, the framework also specifies 25 conditions that act as precursors to
quality disability sport experiences, and subsequently, quality participation. Five of these conditions apply directly to the role of disability sport coaches: (a) knowledge, skill, and learning (e.g., Allan et al., submitted; Shirazipour, Aiken, & Latimer-Cheung, 2017a; Shirazipour, Evans, et al., 2017; Turnnidge et al., 2012), (b) autonomy-supportive behaviours (e.g., Banack, Sabiston, & Bloom, 2011; Cheon, Reeve, Lee, & Lee, 2015), (c) interpersonal skills (e.g., Allan et al., submitted; Shirazipour, Aiken, & Latimer-Cheung, 2017b), (d) ability to develop roles (e.g., Shirazipour, Evans, et al., 2017), and (e) tracking athlete improvement (e.g., Shirazipour et al., 2017a; Turnnidge et al., 2012).

Coaches may also influence more general conditions considered to promote quality disability sport experiences, including accessibility and equipment, the group environment, and sport-related attitudes (Allan, Smith, Côté, Martin Ginis, & Latimer-Cheung, 2018; Evans et al., 2018; Shirazipour, Evans, et al., 2017). While preliminary evidence exists to support the how coaches create quality disability sport experiences for athletes with disabilities, more research is needed to understand the nature of this relationship, and therefore, coaching effectiveness, in disability sport.

When we look more carefully at the body of literature that informs the disability sport coaching effectiveness definition and the Quality Parasport Participation Framework, an important trend becomes apparent. Currently, research focused on disability sport coaches and athletes with disabilities tends to fall into disparate categories. What we know about coaches’ knowledge and behaviours in disability sport is frequently obtained through small-scale questionnaire studies or semi-structured interviews with coaches (e.g., Cregan, Bloom, & Reid, 2007; DePauw & Gavron, 1991; Duarte & Culver, 2014; McMaster, Culver, & Werthner, 2012). On the other hand, the
role that coaches’ play in shaping the experiences or outcomes of athletes with disabilities is frequently told from the athletes’ perspective, often using similar methods (e.g., Allan et al., submitted; Banack et al., 2011; Turnnidge et al., 2012). The results of these studies are primarily athlete-driven and point to a need for not only more research focused on disability sport coaches, but also more research employing novel methods and forms of analyses to inform a nuanced understanding of the complex relationship between disability sport coaches and their athletes. In particular, the perspectives of both coaches and athletes should be employed to enhance our understanding of coaching effectiveness – encompassing the effect of coaches’ knowledge and behaviours on athletes’ experiences and outcomes – in the disability sport context.

Using a collective case study approach, we sought to identify model disability sport coaches and offer an in-depth investigation into how they shaped successful programs for athletes with disabilities. For the purpose of this study, model disability sport coaches were defined as those with a recognized ability to foster quality experiences for their athletes (e.g., Turnnidge et al., 2012), in addition to other outcomes (e.g., performance). Each case was defined as the program in which the model disability sport coach was the head, which encompassed program participants (i.e., athletes) and other volunteers or staff members (e.g., assistant coaches). With the aim of exploring how model disability sport coaches shape programs that create quality experiences for athletes, the objectives of this study were two-fold. Our first objective was to examine the real-time thought processes and behaviours of head coaches in the training environment using observation and dual interview techniques (i.e., mobile and semi-structured interviews). Our second objective was to interview coaches and athletes involved in each
case to triangulate perceptions of what constitutes quality experiences in their program, and the coaches’ role in fostering such experiences. In doing so, we strove to expand the extant literature focused on disability sport coaches, and enhance current understandings of how coaches foster quality disability sport experiences for athletes with disabilities through the use of innovative methods and multiple perspectives.

5.4 Methodology and Methods

Conceptual framework. Hodge and Sharp (2016) define a case study as “an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular person, group, community, project, policy, programme or system in a bounded context” (para. 5). The defining characteristics of a case study are its particularity, meaning that the case is distinct, discrete, or unique, and its boundedness, which may include membership in group, a specific location, or a pre-defined period of time (Hodge & Sharp, 2016; Stake, 2005). Each of these features allow for the capacity to generate an in-depth and holistic understanding of the case.

A collective case study involves a number of cases, studied either consecutively or concurrently, to investigate a phenomenon of interest (Stake, 2005; Yin, 2009). We chose to perform a collective case study to provide insight into the knowledge and behaviours of disability sport coaches who were recognized – through awards and achievements, performance records, and the testimonies of their athletes – for their ability to create quality experiences for their athletes. Considering the small but diverse nature of the disability sport community, and the steadily growing body of research focused on coaches of athletes with disabilities, the decision to perform a collective case study meant that we were able to comprehensively examine some of the best coaches in disability
sport across a variety of training contexts using multiple sources of information.

While a collective case study informed the overall methodological approach, the philosophical underpinnings of this research were grounded in ontological relativism (i.e., reality is multiple, subjective, and mind-dependent) and epistemological constructionism (i.e., knowledge is subjective and socially-constructed; see Smith & Sparkes, 2016; Sparkes & Smith, 2014). Thus, the inclusion of multiple cases, and multiple perspectives within each case (i.e., coach and athlete), meant that convergence on a singular truth was not possible, and rather, these perspectives added significant depth and dimension to the issue of quality disability sport programming. Furthermore, by embedding herself in the training environment of each case, the first author played an active role in the construction and interpretation of knowledge for this study. As such, the findings of this research were framed within her personal understandings of the context, but heavily entrenched in the ‘insider’ perspectives provided by the participants in each case.

**Participants and sampling.** Prior to recruiting participants for this study, institutional ethics approval was obtained (see Appendix A). A criterion-based purposive sampling method was used to identify model disability sport coaches for this study (Sparkes & Smith, 2014). The criteria for coaches to be included were: (a) 18 years of age or older, (b) coach athletes with physical disabilities, (c) at least one year of experience as head coach of their current team, and (d) a recognized ability to foster quality experiences and outcomes. To find coaches who met these criteria, an e-mail was circulated through Canadian disability sport organizations requesting that disability sport program participants and/or administrators provide nominations for model disability sport
coaches. Nominators were provided with a form explaining the inclusion criteria, and asked to “tell us why this person is a successful or effective disability sport coach.” The names of all nominees were used to access publicly available information, which the research team then used to evaluate whether or not the nominees were suitable for study inclusion. Nominees were evaluated based on whether or not they met the basic inclusion criteria, the strength of their nomination (i.e., ability to foster positive athlete experiences and outcomes), coaching experience (i.e., number of years and competitive level with each team), performance records for each team, and awards or accomplishments related to their coaching career. After reviewing the nominations, the inclusion criteria were amended to include coaches with at least six months of experience with their current team, and coaches of athletes with physical and other disabilities.

Fourteen coaches were nominated, and eight were invited to participate following review by the research team. Six coaches were excluded because they did not meet the inclusion criteria. One coach declined to participate, and one coach dropped out of the study due to a personal matter. Consequently, six coaches were included. In addition to the head coach, assistant coaches and athletes in each case were included as participants. Assistant coach positions were defined according to both formal (e.g., paid positions) and informal roles (e.g., internships, volunteers). Table 3 outlines the sample for each case, including demographic information and level of involvement in the data collection process (to the extent that participant confidentiality is maintained). Recruitment procedures are outlined in Figure 1, and recruitment materials (i.e., scripts, e-mails, and coach nomination/evaluation forms) are available in Appendix F. Copies of all letters of information and consent forms are provided in Appendix G.
Table 3. Case demographics and sample size

<table>
<thead>
<tr>
<th>Participants Observed</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
<th>Case E</th>
<th>Case F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Coach</td>
<td>n = 1</td>
<td>n = 1</td>
<td>n = 1</td>
<td>n = 1</td>
<td>n = 1</td>
<td>n = 1</td>
</tr>
<tr>
<td>Assistant Coaches</td>
<td>N/A</td>
<td>n = 1&lt;sup&gt;a&lt;/sup&gt;</td>
<td>N/A</td>
<td>n = 2</td>
<td>n = 1</td>
<td>N/A</td>
</tr>
<tr>
<td>Athletes&lt;sup&gt;b&lt;/sup&gt;</td>
<td>n = 10-14</td>
<td>n = 3-5</td>
<td>n = 8-12</td>
<td>n = 7-11</td>
<td>n = 16-20</td>
<td>n = 1-2</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Participants Interviewed</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
<th>Case E</th>
<th>Case F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Coach</td>
<td>n = 1</td>
<td>n = 1</td>
<td>n = 1</td>
<td>n = 1</td>
<td>n = 1</td>
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</tr>
<tr>
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<table>
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<tr>
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<td>Female</td>
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<tr>
<td>Years of Experience&lt;sup&gt;c&lt;/sup&gt;</td>
<td>25</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>2</td>
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<td>Impairment</td>
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<td>None</td>
<td>Physical</td>
<td>Physical</td>
<td>None</td>
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<table>
<thead>
<tr>
<th>Athlete Demographics</th>
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<td>Gender</td>
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<td>Mixed</td>
<td>Mixed</td>
<td>Mixed</td>
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<td>Age Range</td>
<td>6-24</td>
<td>17-25</td>
<td>13-50</td>
<td>7-19</td>
<td>18-40</td>
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<td>Impairments</td>
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<tr>
<td></td>
<td>Sensory</td>
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<td>Cognitive</td>
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<table>
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<tr>
<th>Sport Type and Level</th>
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<th></th>
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<tr>
<td>Individual or Team</td>
<td>Individual</td>
<td>Individual</td>
<td>Team</td>
<td>Team</td>
<td>Team</td>
<td>Team</td>
</tr>
<tr>
<td>Integrated or Segregated</td>
<td>Integrated</td>
<td>Integrated</td>
<td>Club</td>
<td>Club</td>
<td>Club</td>
<td>Club</td>
</tr>
<tr>
<td>Competitive Level</td>
<td>Club</td>
<td>Club</td>
<td>Club</td>
<td>Club</td>
<td>Club</td>
<td>Club</td>
</tr>
<tr>
<td>(competitive range of</td>
<td>(grassroots to</td>
<td>(provincial to</td>
<td>(grassroots to</td>
<td>(grassroots to</td>
<td>(grassroots to</td>
<td></td>
</tr>
<tr>
<td>individual athletes)</td>
<td>international)</td>
<td>international)</td>
<td>provincial)</td>
<td>provincial)</td>
<td>provincial)</td>
<td>(international)</td>
</tr>
</tbody>
</table>

<sup>a</sup>Represents the guide for an athlete with a visual impairment.

<sup>b</sup>Includes the range of athletes present across observed training sessions.

<sup>c</sup>Denotes years of experience coaching athletes with a disability.
Figure 1. An overview of participant recruitment, data collection, and data analysis procedures for all cases.
**Data collection.** Data collection was carried out separately for each case, and involved the following: (a) document review, (b) mobile interviews, and (c) semi-structured interviews. Data collection procedures are described below and visually represented in Figure 1. All data collection materials (i.e., demographic questionnaire, mobile interview protocol, and interview guides) are provided in Appendix H.

**Document review.** Prior to the interviews, each head coach was asked to provide a copy of their resume and/or coaching certifications. Additionally, content regarding the mission, values, and structure of each program, including criteria for participation and the role of the coach, was retrieved from the webpage of each club or team.

**Mobile interviews.** Each head coach took part in a mobile interview protocol, in which the first author ‘shadowed’ the coach over the course of three or four training sessions (see Büscher, Urry, & Witchger, 2010; Sparkes & Smith, 2014). The first training session served to familiarize coaches and their athletes to the presence of the researcher. During this time, the first author moved through the practice with the coach – from beginning to end – while passively observing and taking field notes. In subsequent sessions, participants were asked to wear a lapel microphone for the purpose of audio-recording their interactions with athletes during practice time. During these sessions, the first author engaged in unstructured interview techniques designed to probe the coach for insights and reflections on observed behaviours. The way in which the first author interacted with coaches and athletes over the course of these sessions varied by case at the coaches’ request (i.e., active participant vs. passive observer). Practice durations ranged between 60 and 180 minutes. Throughout data collection, the first author continued to record comprehensive memos and field notes.
Semi-structured interviews. Once the mobile interview protocol was complete, the head coach, assistant coaches, and athletes on each team were invited to participate in a semi-structured follow-up interview. The interview guide for coaches and athletes followed the same structure, but the questions were modified to reflect the perspective of each individual. Each interview covered five sets of questions, guided by Patton (2015): (a) opening questions (e.g., “Tell me about your decision or motivation to pursue a career as a coach” or “Tell me about your motivation or reasons for getting involved in disability sport?”); (b) ‘what’ questions (e.g., “In your opinion, what defines an ideal or optimal experience in sport?”); (c) ‘how’ questions (e.g., “How would you describe your role in shaping the quality of athletes’ experiences in disability sport?” or “How would you describe your coach’s role in shaping the quality of your experiences in disability sport?”); (d) follow-up questions (e.g., “What was the purpose of [behaviour observed during mobile interview]?” or “How does [behaviour observed during mobile interviews] make you feel?”), and (e) closing questions (e.g., “Is there anything you feel that I have missed, or anything else you would like to comment on?”). Interviews with head coaches \( (n = 6) \) lasted between 40 and 85 minutes \( (M = 63.5 \text{ minutes}) \). One assistant coach was interviewed for 31.5 minutes. Finally, interviews with athletes \( (n = 17) \) ranged from 17 to 42 minutes \( (M = 29.7 \text{ minutes}) \).

Data analysis. All data sources were analyzed holistically for each case, and each case was thematically analyzed using the guidelines provided by Braun, Clarke, and Weate (2016). To begin, the first author reviewed all documents, field notes, audio-recordings and transcripts several times while comparing across data sources and taking notes to gain an intimate familiarity with the data. Subsequently, she inductively coded
all textual data line by line for the purpose of generating initial codes. Initial codes revolved around the interaction of the coach with athletes and the broader training environment (e.g., attitudes, behaviours), as well as the outcomes of those interactions (e.g., influence on athletes’ experiences). The third stage involved sorting the initial codes into overarching candidate themes to reflect patterns in aspects of coaching and their influence on athletes’ experiences across various levels (e.g., interpersonal, community). Candidate themes were then reviewed to ensure they were representative of both the coded extracts and the dataset as a whole. Finally, themes were refined and labelled, and a one-page summary was drafted to represent each case. Summaries were presented to the second and fourth authors, who provided feedback on the structure and interpretation of the findings, while also challenging the biases of the first author.

The technique of analytical bracketing was used to focus separately and exclusively on each case, prior to analyzing the dataset as a whole (Gearing, 2004; Gubrium & Holstein, 1997). In other words, we aimed to understand the phenomenon of interest (i.e., how model coaches create quality experiences for athletes with disabilities) in the immediate setting of each particular case before examining the findings in the broader context of all six cases and the institution of Canadian disability sport more broadly. Notably, the findings were linked to existing theory after the independent analyses were complete, and these links are demonstrated in short reflections following each case in the results section (e.g., Culver & Werthner, 2018). Subsequently, themes were compared and contrasted across cases to highlight overarching themes (i.e., similarities) and contextual differences in the practices of model disability sport coaches (see Figure 1).
Methodological rigour. Grounded in ontological relativism and epistemological constructionism, a flexible list of criteria was developed to ensure rigour was maintained throughout the research process, and within the corresponding product (Smith & McGannon, 2017; Sparkes & Smith, 2014). The methods and analytical practices selected to represent the collective case study presented in this paper align closely with other traditions of research, including ethnography and narrative inquiry. As such, the criteria suggested to evaluate this unique study are informed by criteria recommended for ethnographers (Richardson, 2000) and narrative researchers (Lieblich, Tuval-Mashiach, & Zilber, 1998), as well as broader criteria proposed for the judgment of qualitative research (e.g., Smith, & Caddick, 2012; Tracy, 2010). Our list of criteria includes the following: (a) width, (b) credibility, (c) transparency, (d) coherence, (e) substantive contribution, and (f) impact. Definitions and the strategies used to achieve these criteria are presented in Table 4.
### Table 4. A flexible list of criteria for evaluating the methodological rigour of this study

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
<th>Strategies Used to Achieve Criteria</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>Comprehensiveness of the evidence</td>
<td>• Multiple data sources</td>
<td>Lieblich et al. (1998)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Multiple perspectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In-depth analyses (e.g., involving bracketing)</td>
<td></td>
</tr>
<tr>
<td>Credibility</td>
<td>The research provides a credible, embodied sense of lived experience</td>
<td>• Triangulation of data sources and perspectives</td>
<td>Richardson (2000)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Significant time in the field (first author)</td>
<td>Tracy (2010)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Thick description</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Participant quotes support interpretations</td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td>Self-reflexivity and clarity throughout the research process</td>
<td>• Audit trail outlining decisions and timelines</td>
<td>Smith &amp; Caddick (2012)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reflexive journal (first author)</td>
<td>Tracy (2010)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Co-authors provided ‘checks and balances’</td>
<td></td>
</tr>
<tr>
<td>Coherence</td>
<td>The interpretation creates a complete or meaningful picture</td>
<td>• Achieves research objectives</td>
<td>Lieblich et al. (1998)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contextually-situated analysis</td>
<td>Tracy (2010)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Meaningful cross-case comparisons</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Links to existing theory</td>
<td></td>
</tr>
<tr>
<td>Substantive</td>
<td>The research meaningfully contributes to the current body of literature</td>
<td>• Innovative methodology</td>
<td>Richardson (2000)</td>
</tr>
<tr>
<td>Contribution</td>
<td>and understandings of social life in general</td>
<td>• Expands disability sport coaching literature</td>
<td>Tracy (2010)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Extends theoretical knowledge (e.g., coaching effectiveness, quality participation)</td>
<td></td>
</tr>
<tr>
<td>Impact</td>
<td>The research affects or moves the reader</td>
<td>• Evocative representation</td>
<td>Richardson (2000)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Capacity for naturalistic generalization</td>
<td>Tracy (2010)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Practical implications for coaches</td>
<td></td>
</tr>
</tbody>
</table>
5.5 Results and Discussion

To situate the findings relative to the coaching effectiveness definition (Côté and Gilbert, 2009), each case will be presented in three parts. First, we provide a brief description of the program context. Second, we outline the role of the coach in shaping the program. Third, we offer a reflective note linking the coach’s role to the quality of athletes’ experiences in disability sport using the experiential elements of participation (Martin Ginis et al., 2017) and existing literature. A cross-case comparison follows the presentation of all cases.

Case A. The head coach in Case A (‘Coach A’) is an able-bodied female with extensive experience coaching able-bodied athletes and athletes with a disability. She is the founder of a competitive program for athletes with a disability and their able-bodied siblings. Program participants range in age from 6 to 24, and include physical, sensory, and cognitive impairments. The club caters to athletes from novice all the way up to the Paralympic level. Under the leadership of the head coach, several volunteers help to run the program – the majority of which are former program participants.

Coach A cultivated a vision for the team that was built on the seamless integration of group members, regardless of skill or ability. “The big picture is inclusion, completely,” she explained. She strives to foster meaningful and supportive relationships among participants – akin to a disability sport “family” that exists outside of the traditional home. As a senior athlete stated, “On top of relationships, you get to see people grow. I’ve known [athlete] since he was probably five and now he’s almost a foot taller than I am.” Her approach to coaching is highly deliberate and self-aware. She
endeavours to understand the person behind every athlete, consider the context, and engage in continuous self-reflection and monitoring to provide the best possible experience for athletes in the program. According to Coach A, “It’s about each individual athlete, and what they want to do.” She centres her coaching around each individual by creating an equal partnership grounded in mutual trust and respect, and sharing ownership over athletes’ participation in the program. “She sees something about every person and then she kind of puts that vision [into place] through that person, and is able to influence the person to see that as well,” explained one athlete. Another athlete stated, “Seeing different like levels of like, um, um, challenges between people…I can tell that I’m not alone…that I can expand on my ability.” This statement exemplifies athletes’ perceptions of the safe and positive learning environment fostered by Coach A, in which she adapts for the needs of each individual and remains mindful of long-term athlete development.

**Links between coach behaviours and experiential elements.** Consistent with the findings of Turnnidge et al. (2012) and Shirazipour et al. (2017b), belongingness was emphasized by Coach A through her vision for the team, including the personal relationships she developed with athletes and the supportive community she fostered within the training environment. In addition, she demonstrated an autonomy-supportive and mastery-oriented coaching style. Autonomy-support has been linked to increases in Paralympic athletes’ motivation (Banack et al., 2011; Cheon et al., 2015), thus contributing to experiences of autonomy. Alternatively, coaches’ knowledge and skill have been identified as key contributors to challenge and mastery in disability sport (Shirazipour et al., 2017a; Turnnidge et al., 2012). The coach drew on past experience,
self-reflection, and knowledge of each athlete to provide a tailored level of challenge and help athletes meet their individual goals (e.g., consideration; Allan et al., submitted). Finally, Coach A was able to support the meaning attributed to athletes’ sport experiences by providing a space where athletes felt equal, included, and able to develop skills that were transferable to other areas of their lives – as highlighted in the narratives of disability sport participation presented by Allan et al. (2018).

Case B. The head coach in Case B (‘Coach B’) is an able-bodied male. He is the head of the disability sport program at a large integrated individual sport club. He coached able-bodied athletes for several years before introducing athletes with a disability into his training group. His current training group includes able-bodied athletes, as well as athletes with physical and sensory impairments. All of his athletes are women between the ages of 17 and 25 who compete at the provincial, national, and/or international levels. One athlete trains and competes with a male guide, who took on an informal role as assistant coach with this particular athlete.

When asked about his role in shaping the experiences of his athletes, Coach B responded, “Well, to provide them with the best program to succeed.” His philosophy is all about balance and interconnectivity between seemingly disparate aspects of training athletes to perform at the highest levels: the ‘personal’ and the ‘professional.’ For example, he demonstrated extensive professional knowledge and credibility through formal education and experience in the field. This was balanced with a sincere passion for disability sport, and a devotion to promoting independence and opportunity among young people with disabilities. Coach B endeavours to “make them as independent as possible, in a safe way, but as normal as possible.” He maximizes his relationship with
each athlete by taking the time to get to know each one on a personal level and showing a commitment to their development, while also holding the athlete accountable to high standards of training and performance. “It’s definitely the closest I have ever been with a coach or adult figure I’d say…it’s professional but it’s personal at the same time,” explained one athlete. He often works one-on-one with athletes in the broader context of the group, which entails individualized training plans and, at times, trusting athletes to train independently. “Everybody has to accept their own responsibility, the coach and the athlete,” he stated. According to Coach B, “the most important thing is improvement.” Long-term planning and goal-setting were considered the cornerstone to ensuring progress and success. However, the need to have fun and enjoy training was also prevalent: “[Coach B] usually has a smile on his face, and he likes to have a good laugh. He’s serious about the sport, but not so serious that his mood or attitude is negatively affected” (field notes, Case B).

**Links between coach behaviours and experiential elements.** Coach B focused on the importance of mastery. In other words, he felt that athletes needed to see themselves improve and succeed in order to have a fulfilling experience in sport. Mastery approaches to coaching have been emphasized through interventions with coaches in able-bodied youth sport contexts, demonstrating reductions in anxiety (Smith, Smoll, & Cumming, 2007) and improvements in mastery-orientations (Smoll, Smith, & Cumming, 2007) among athletes – which may facilitate engagement and mastery, respectively. While Coach B did not explicitly discuss the importance of belongingness, one of his athletes stressed the closeness of her relationship with the coach and the broader social environment as key contributors to the quality of her participation – aligning with the
views of athletes presented by Allan et al. (submitted) and Turnnidge et al. (2012).

Finally, autonomy and meaning were linked to Coach B’s belief in the capacity for sport to foster independence among individuals with a disability. Clarke and Coote (2015) highlighted the potential for ‘knowledge gained’ to improve confidence and independence with respect to exercise among individuals with multiple sclerosis. Similarly, Coach B empowered athletes with the skills and education to train self-sufficiently and optimize performance through personal habits and lifestyle choices, thus encouraging independence within and beyond the sport context.

**Case C.** The head coach in Case C (‘Coach C’) is a man with a physical disability. After personally experiencing the benefits of disability sport involvement, he helped to found a new disability sport club in a community that previously had limited access to disability sport opportunities. The club is largely comprised of recreational athletes, but includes some members of the provincial team. Individuals of any ability are welcome to practice with the club, but only classifiable athletes can participate in competitions. Athletes range in age from 13 to 50, and primarily include people with physical impairments. The head coach participates in practices and competitions alongside the athletes. A team manager assists with coaching responsibilities when the coach is playing, and also takes care of all administrative duties. Able-bodied volunteers help out before and after practice, and often participate in the practices as well.

Coach C’s approach is grounded heavily in his experiences as a former able-bodied athlete, a person with a disability, and a current disability sport athlete. “I think what got me interested in it is how much my life changed when other people coached me and brought that atmosphere around,” he stated. These experiences enabled an immersive
understanding of the athletes’ needs and concerns, as well as the inner workings of the
game. The coach works hard to facilitate fun and engagement among athletes of all ages
and abilities on the team. “It’s so much easier to run [practice] and keep people’s
attention when they’re having fun, they’re into it,” explained Coach C. Fun is at the
centre of his coaching philosophy, and reinforced in the views of his athletes: “I think
that the fun actually makes you push harder…I wouldn’t drive two hours, one way, every
week for nine years if I didn’t enjoy it.”

Coach C dedicates extra care and attention to welcoming and developing new
athletes, as exemplified in the following interaction during practice time:

Coach C: Wanna jump in a bucket [sport chair]?
Spectator: I don’t know man, it’s hard.
Coach C: Yeah, I won’t lie, it is hard…but there is some if you wanna get in
one man.

At the other end of the spectrum, he shares leadership and decision-making with senior
team members. The broader culture of the club exemplified two core values: camaraderie
(i.e., shared humour and understanding among athletes) and community (i.e., integration
of family, friends, and volunteers). As a founding member, the coach labours to continue
establishing the club, expand its reach, and grow the sport more broadly for local para-
athletes.

Links between coach behaviours and experiential elements. Through his efforts
to encourage fun and focus among the members of his team, Coach C’s style and practice
catered largely to engagement. Of the six experiential elements, engagement has received
the least attention in disability sport (e.g., Shiraziour, Evans, et al., 2017). However,
research in youth sport contexts has shown that enjoyable immediate sport experiences
are crucial to the development of positive short- and long-term outcomes (e.g., Vierimaa, Turnnidge, Bruner, & Côté, 2017). By diversifying activities to capture the attention and enjoyment of his athletes, and including input from the team, he also provided athletes with challenge and autonomy – while recognizing that individual athletes approached the club with different motives and aspirations (e.g., Shirazipour et al., 2017a; Turnnidge et al., 2012). In addition to these elements, athletes emphasized the sense of belongingness they experienced through the broader social culture of the club, and described meaning in terms of shared experiences that allowed them to learn and trade life skills. The influence of shared experiences on perceptions of belongingness and meaning among athletes with disabilities are described by Allan et al. (2018) and Shirazipour, Evans, et al. (2017).

**Case D.** The head coach in Case D (‘Coach D’) is a female with a physical impairment that makes her classifiable for disability sport. Interestingly, she began playing and coaching disability sport before she acquired a disability, and has never coached a solely able-bodied sport. Case D began as a drop-in program for youth with disabilities, but evolved into grassroots disability sport team under the leadership of Coach D. The club includes boys and girls between the ages of 7 and 19 with physical and cognitive impairments. Able-bodied siblings are also encouraged to participate. While the majority of participants are new to disability sport, a couple of athletes also play on the provincial team. The team is run by Coach D with the assistance of two informal assistant coaches (an intern with the program and the program coordinator) and parent volunteers.

Coach D’s philosophy is rooted in personal experience, passion, and commitment to her role. Early experiences volunteering in programs for youth with disabilities
instilled a passion for physical activity promotion. Subsequently, what began as a chance encounter with a disability sport coaching position grew into a wholehearted commitment and sense of vocation. “A lot of my drive, in terms of coaching, was more about making sure that the quality of our programming was high,” she explained. “As long as the player is developing the skills that they’re gunna need to be active for life, that’s my goal.” At the same time, acquiring a disability and actively participating in disability sport enabled enhanced insight into the experiences of her athletes. Asked what sets Coach D apart from her other coaches, one athlete responded, “She’s one of the few disabled athlete coaches.”

By taking the time to develop personal relationships and learn what works best for each athlete, Coach D furthers her understanding of athletes’ needs and tailors her coaching accordingly. As the same athlete described, “[Coach D] is the only one who’s technically able to like, translate words to me that make sense.” She caters particularly well to the needs of young children, and makes an effort to connect with each one. For example: “When I walked over to greet [Coach D], she interrupted me to enthusiastically welcome one of the participants” (field notes, Case D). Overall, Coach D strives to create opportunities for success in a supportive and challenging learning environment. This meant engaging athletes with fun games (‘drills in disguise’) and a progressive level of challenge, while also encouraging respectful interactions and making everyone feel welcomed.

**Links between coach behaviours and experiential elements.** Coach D firmly believed that there were two components that contributed to athletes’ experiences of success, or mastery, in sport: belongingness (i.e., a supportive social environment,
encompassing teamwork and respect) and challenge (i.e., activities that are tailored, progressive, and appropriately adapted). “I don’t think you can really have one without the other,” she stated. She promoted these elements, in addition to engagement and mastery, through her interactions with athletes and the design of practice activities.

Furthermore, Coach D was extremely passionate about physical activity participation and the associated benefits for youth with disabilities; thus, she attempted to ensure a key takeaway (or meaning) of athletes’ sport participation was the importance of a physically active lifestyle. Similar themes emerged in the work of Clarke and Coote (2015) after interviewing individuals with multiple sclerosis who participated in a community-based exercise program. More specifically, they identified three themes related to participants’ exercise participation: (a) the role of the group as a social and motivational factor, (b) improved energy and ability, and (c) increases in knowledge promoting self-confidence and independence.

**Case E.** Case E is a national team program encompassing athletes with physical impairments who train in decentralized locations across the country. They meet for centralized training camps or tournaments in varied locations every six to eight weeks. The head coach (‘Coach E’) is an able-bodied male who worked with the national team in various roles before being named the head coach. A formal assistant coach – a male with a physical impairment and a former athlete with the program – also works with the team. The program is managed by a high-performance director and supported by several staff, including an integrated support team (i.e., professionals in sport science and medicine).

The head and assistant coaches in Case E work together in a complementary partnership described by some athletes as “good cop, bad cop”. Using this analogy, the
head coach would be the ‘good cop’ – he is deliberate in his actions and keeps his emotions in check. He is responsible for planning and oversight, and brings extensive knowledge to the team from an ‘outsider’ perspective. Alternatively, the assistant coach would be the ‘bad cop’ due to his somewhat emotional style of coaching (and playing). He contributes in-depth insider knowledge to the partnership, and takes on the role of one-on-one coach and mentor during training. In the words of one athlete, “[The head coach] is extremely well organized and extremely deliberate in his actions, and [the assistant coach] is more of a, say, whip-cracker…they complement each other perfectly.” Notably, the ‘bad cop’ role was not perceived as negative or ‘less than’ despite the terminology used; the synergy and balance between coaches is what made this partnership so effective.

Led by the head coach, the coaches work to facilitate a positive learning environment where “it’s okay to fail” before experiencing success. Correspondingly, the coaching staff make a point of recognizing athletes for doing things well. “Every coach is always stopping [the play] when you screw it up, right? But [we] slow it down once in a while when a nice play is made, so everybody sees it,” explained the assistant coach. This creates positive learning opportunities for all athletes, regardless of athletes’ goals or levels of experience (i.e., from rookies to veterans). The coaching staff also understands and respects their roles in the broader context of the team, which includes the organizational capacity of support staff, whether or not the team is centralized for training, and the unique social context, traditions, and norms associated with the program. One important change that the coaching staff endeavours to implement is shifting the culture from ‘sport-first’ to ‘person-first’:
Um personal goal of mine with this group of athletes… I wanna avoid where we were with the older athletes in the previous um let’s say ten years, where rugby is all they had in their life… so I’m very supportive of our young kids staying in school, finishing their degrees, and well I’m also very supportive of our older athletes finding jobs or trying to get job opportunities or get involved into coaching, that type of stuff so, again they achieve a better life-sport balance.

(Coach E)

**Links between coach behaviours and experiential elements.** The training environment was optimally designed to promote mastery, including daily monitoring and access to an integrated support team. While mastery is a natural component of high performance programming (e.g., Allan et al., 2018), Coach E emphasized the learning process as opposed to objective outcomes. Interestingly, the coach-athlete processes at play in Team E paralleled the findings of a study examining a model sport program for youth with disabilities (Turnnidge et al., 2012). By focusing on the learning process, the coaching staff facilitated autonomy (e.g., eliciting athletes’ feedback), challenge (e.g., letting athletes know it’s okay to try and fail), and engagement (e.g., diversifying drills to encourage focus). Belongingness and meaning were inherent within the broader social context of the sport (e.g., shared experiences enabling athletes to learn and trade life skills; Allan et al., 2018; Shirazipour, Evans, et al., 2017), and the coaches were respectful of this unique community. Despite the dominance of performance narratives in elite sport (Douglas & Carless, 2006), Coach E nurtured meaning by encouraging athletes to lead multidimensional lives (i.e., discovery narratives; Allan et al., 2018).

**Case F.** The head coach in Case F (‘Coach F’) is an able-bodied male with extensive experience as both an athlete and coach. He began coaching athletes with disabilities when the position of head coach for the para-program became available with the national team. Case F represents an integrated national team training out of a
centralized location. Only para-athletes were included under the supervision of Coach F, including individuals with physical and sensory impairments (22 to 42 years old). The para-program is run by Coach F under the governance of the national sport organization and includes access to an integrated support team.

Coach F’s style and practice of coaching is an integral part of who he is as a person. “I’m always thinking about the teaching process…it is a constant thing,” he stated. When asked about the strategies he uses to facilitate quality experiences for his athletes, Coach F emphasized his genuine interest in the athletes’ lives: “I mean, it's not a strategy. It really isn't a strategy for me. It isn't something I do in a calculated fashion…when I go away from this place – I give a shit.” Coach F pairs an athlete-driven, relationship-based style of coaching with extensive technical knowledge learned through his personal experiences in the sport. “I don't think there's a science behind this, I think it's about relationships. It's about getting to know them as people,” he explained. Athletes value Coach F’s emotional investment, and appreciate his willingness to listen and act as a sounding board for issues and concerns. For example, one athlete described his interaction with Coach F when faced with a health complication that could potentially end his disability sport career: “Like it’s hard for myself to accept but also to vocalize it to a coach. It’s been reasonably easy to do so just because he’s open with that kind of stuff.” Another athlete explained, “You feel like he’s listening to you and he really thinks about things.” By getting to know each athlete as an individual and including them in the planning process, he is able to contextualize training within the broader circumstances of athletes’ lives.

More broadly, the integrated and centralized nature of the training environment
creates a sense of unity and togetherness that encourages athletes to work hard and push their limits. Although he is not directly responsible for the broader culture of the program, Coach F plays a crucial role in advocating for athletes with disabilities and championing the growth of disability sport in Canada. According to Coach F, “It’s about going from point A to point B as fast as you can… the various disabilities only change the parameters within which you work to achieve that.”

**Links between coach behaviours and experiential elements.** Supporting the work of Turnnidge et al. (2012) and Shirazipour et al. (2017b), belongingness was emphasized through the interpersonal relationships developed by the coach, as well as the broader community of disability sport athletes. This sense of community was also a key motivator for athletes, pushing them towards bigger challenges and loftier goals (e.g., Clarke & Coote, 2015). Coach F helped to ensure that all athletes had access to resources that would support their experiences of mastery, while athletes described challenge as an experiential aspect that came from within themselves. Engagement was viewed in a similar manner, thus highlighting the importance of coach-athlete collaboration to optimize athletes’ experiences and performance – as highlighted in the contextualized coaching effectiveness definition for disability sport (Allan et al., submitted). Finally, Coach F worked towards meaning by advocating to ensure equality and opportunity for para-athletes. Townsend and colleagues (2016) have called for the need to ground disability sport coaching in social-relational and human rights models of disability, and Coach F acts as a notable exemplar.

**Cross-case comparisons.** Collectively, the experiential elements of participation (i.e., autonomy, belongingness, challenge, engagement, mastery, and meaning; Martin
Ginis et al., 2017) were fostered, either directly or indirectly, in each case. However, the specific elements that were emphasized differed across cases. For example, Coach A emphasized belongingness, while engagement was the focus of Coach C. Interestingly, the philosophies and practices of model disability sport coaches – encompassing the ways in which they fostered quality experiences for athletes in their programs – were embedded more broadly in a socio-ecological framework (see Brown, Jeanes, & Cutter-Mackenzie, 2014 for a brief history). Socio-ecological models operate under the assumption that multiple systems exert influence on an individual’s behaviour (e.g., individual, interpersonal, organizational, and intercultural; Bronfenbrenner, 1979). In this study, four overarching themes were identified, and due to relevant parallels, subsequently mapped onto the levels of a socio-ecological framework. These overarching themes corresponded to a layered level of influence between coaches’ knowledge and behaviours and the quality of athletes’ disability sport experiences. In particular, common features within each layer were found to be conducive to specific elements associated with quality experiences in each disability sport program. Across cases, coaches capitalized on different aspects of these layered influences, thus creating distinct emphases on particular elements. The themes are described below, and a comparison of cases across themes is presented in Table 5. A list of experiential elements corresponding to each theme, and trends for fostering the elements across cases, is provided in Table 6.

The first theme, coaching philosophy, represented the processes involved as coaches learned and acquired knowledge, formed attitudes towards disability and disability sport, and subsequently shaped their coaching philosophy over time. While coaches’ philosophies did not lead directly to quality experiences, they appeared to
predisposed behaviours that resulted in athletes’ perceptions of quality participation throughout development. The second theme, *coaching style*, referred to the ways in which coaches developed and managed relationships, as well as how they approached their interactions with athletes. Coaches’ interpersonal styles promoted three elements: autonomy (e.g., including athletes in planning and decisions), belongingness (e.g., developing personal relationships with athletes), and mastery (e.g., monitoring athletes and recognizing progress). The third theme, *learning environment*, encompassed the coach’s role in shaping the physical and social environment, as well as the planning and execution of training activities. While belongingness was fostered within the social environment of each case (e.g., facilitating opportunities for shared learning experiences), mastery most often stemmed from coaches’ interaction with the physical environment (e.g., providing access to equipment and resources). Alternatively, challenge and engagement often resulted from the design of training activities (e.g., offering diversity and a progressive degree of difficulty). The fourth and final theme, *broader vision for the program or disability sport*, reflected coaches’ overarching goals, foundational roles, and perceived next steps for the development of their specific program or disability sport more generally. This theme was most commonly associated within meaning, which was described in terms of transferable life skills and equality in the sport domain.
Table 5. A comparison of cases across thematic levels

<table>
<thead>
<tr>
<th>Cases</th>
<th>Coaching Philosophy</th>
<th>Thematic Levels</th>
<th>Broader Vision</th>
</tr>
</thead>
</table>
| Case A | • Focusing philosophy on the person and context  
          • Obtaining formal education and experience  
          • Learning from others (i.e., asking questions and observing)  
          • Engaging in self-reflection and awareness | • Validating and caring for athletes  
          • Showing vulnerability and relating to athletes  
          • Recognizing athletes’ potential and progress  
          • Tailoring instruction and feedback  
          • Sharing ownership with athletes | • Setting a positive tone and expectations  
          • Ensuring emotional and physical safety  
          • Adapting activities to meet individual needs  
          • Valuing long-term development and the learning process  
          • Facilitating access and removing barriers  
          • Nurturing seamless integration and inclusion  
          • Instilling family values and contribution (i.e., desire to give back) | |
| Case B | • Understanding that needs are different, but the process is the same  
          • Demonstrating passion for disability sport  
          • Obtaining formal education and experience in the field | • Developing close, personal relationships  
          • Tailoring training and working one-on-one  
          • Collaborating and problem-solving  
          • Investing in athletes (i.e., showing commitment) | • Setting and upholding goals and expectations  
          • Monitoring progress and improvement  
          • Optimizing training in and out of practice time  
          • Encouraging a friendly rapport between coaches and athletes  
          • Promoting independence in and beyond disability sport  
          • Increasing opportunities for disability sport athletes | |
| Case C | • Focusing philosophy on fun and enjoyment  
          • Learning from others (i.e., asking questions and observing)  
          • Drawing on personal experiences with sport and impairment | • Encouraging new members  
          • Ensuring positive first experiences  
          • Sharing leadership and decision-making  
          • Providing one-on-one attention and feedback | • Diversifying activities and roles  
          • Matching ability levels in and between groups  
          • Ensuring physical safety and access to equipment  
          • Facilitating social connection and shared understanding  
          • Integrating family and friends  
          • Establishing the club and expanding its reach  
          • Increasing access to disability sport | |
<table>
<thead>
<tr>
<th>Cases</th>
<th>Coaching Philosophy</th>
<th>Coaching Style</th>
<th>Learning Environment</th>
<th>Broader Vision</th>
</tr>
</thead>
</table>
| Case D | • Embracing coaching as a vehicle for physical activity promotion  
• Drawing on personal experiences with sport and impairment  
• Complementing skills with relevant postsecondary education | • Knowing when to be silly and serious  
• Showing vulnerability and relating to athletes  
• Making a personal connection  
• Addressing individual athletes during practice  
• Eliciting athlete input and nurturing leadership | • Disguising drills as games  
• Providing a progressive level of challenge  
• Pairing players to optimize learning  
• Encouraging respectful interactions  
• Making sure everyone is included and supported | • Ensuring high quality disability sport programs  
• Encouraging lifelong physical activity participation |
| Case E | • Coaching from a person-first perspective  
• Understanding that needs are different, but the process is the same  
• Pairing complementary knowledge, experience, and education | • Showing vulnerability and empathizing with athletes  
• Letting athletes know it’s okay to fail  
• Including athletes in planning/decision-making  
• Treating athletes as individuals and equals  
• Providing clear objectives and communication | • Diversifying activities and roles  
• Providing a progressive level of challenge  
• Facilitating shared experiences and mentorship among athletes  
• Respecting team norms and traditions  
• Monitoring and communicating online when decentralized  
• Optimizing with IST | • Changing the culture from sport-first to person-first |
| Case F | • Drawing on experience as coach and athlete  
• Feeling a sense of vocation or service  
• Engaging in self-reflection and awareness  
• Integrating varied sources of knowledge | • Adapting for individual abilities and needs  
• Considering the person behind the athlete  
• Collaborating and problem-solving  
• Promoting self-confidence and validating athletes | • Facilitating access and removing barriers  
• Monitoring athletes and making adjustments via centralized training environment  
• Encouraging unity and equality in shared training environment  
• Optimizing with IST | • Advocating for equal treatment of all athletes  
• Enhancing pathways of development for Canadian disability sport athletes |
Table 6. Presence of experiential elements and trends for fostering them across cases at each thematic level

<table>
<thead>
<tr>
<th>Coaching Philosophy</th>
<th>Coaching Style</th>
<th>Learning Environment</th>
<th>Broader Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precursors of coach behaviours and experiential elements:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Coaching philosophies generally encompassed person-first and context-specific approaches (e.g., understanding that individual needs may vary, but the process is the same).</td>
<td>Autonomy ($n = 6$)</td>
<td>Belongingness ($n = 6$)</td>
<td>Meaning ($n = 6$)</td>
</tr>
<tr>
<td></td>
<td>• Eliciting athlete input during practice</td>
<td>• Encouraging support, respect, and teamwork</td>
<td>• Facilitating opportunities for athletes to develop skills that are transferable to other aspects of their lives</td>
</tr>
<tr>
<td></td>
<td>• Including athletes in planning and decisions</td>
<td>• Facilitating opportunities for shared experiences and/or mentorship</td>
<td>• Providing a platform for equality and opportunity in the sport domain</td>
</tr>
<tr>
<td></td>
<td>• Providing opportunities for leadership</td>
<td>Challenge ($n = 5$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Belongingness ($n = 6$)</td>
<td>• Diversifying activities and roles (e.g., increasing the level of difficulty)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Developing a personal relationship</td>
<td>• Providing a tailored and progressive level of challenge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Showing vulnerability and relating to athletes</td>
<td>Engagement ($n = 4$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Validating, reassuring, and caring for athletes</td>
<td>• Diversifying activities and roles (e.g., presenting drills as games)</td>
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<tr>
<td></td>
<td>Mastery ($n = 4$)</td>
<td>• Ensuring safety (physical and emotional) and access to equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tailoring training and adapting for individual needs and abilities</td>
<td>Mastery ($n = 5$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Monitoring and recognizing progress</td>
<td>• Setting goals and upholding team standards/expectations</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Optimizing training through access to support staff and/or educating athletes about personal care</td>
</tr>
</tbody>
</table>

Note. $n$ refers to the number of cases that exemplified the experiential element (Martin Ginis et al., 2017) at each thematic level.
5.6 General Discussion

In this paper, a collective case study of model disability sport coaches is presented to demonstrate how coaches shape quality experiences for athletes with a disability. Each coach played a key role in the development of the program; their philosophical beliefs and vision for the team corresponded to the implementation of core values that translated into quality experiences for athletes across four thematic levels. While there were general trends in the strategies or behaviours employed by coaches to achieve the experiential elements of participation within each theme, each coach emphasized a different element or combination of elements in their coaching philosophy and practice. Taken together, these findings support, extend, and enhance the existing literature focused on disability sport coaches.

In terms of theory, the results of this study offer support for existing conceptualizations of quality disability sport participation. All six experiential aspects of participation were identified across cases from the perspectives of both coaches and athletes (see Martin Ginis et al., 2017). Aligning with previous research, meanings attributed to quality participation, including the specific element(s) encompassed within quality experiences, were individually-dependent and changed according to the context and over time (Allan et al., 2018; Shirazipour, Evans, et al., 2017). Notably, the Quality Parasport Participation Framework specifies 25 conditions that act as precursors to quality experiences for athletes with a disability, several of which are directly or indirectly shaped by the coach (Evans et al., 2018). Not only did these cases provide evidence to support several of the conditions outlined by Evans and colleagues (2018),
but they also provide a nuanced understanding of strategies that coaches can use to target specific experiential aspects of participation (for examples, see Table 6).

Furthermore, these findings extend theoretical knowledge of the coaching effectiveness definition in disability sport (Allan et al., submitted; Côté & Gilbert, 2009). Within each case, various aspects of coaches’ knowledge and behaviours were linked to the quality of athletes’ disability sport experiences. These findings add to the limited body of research that examines the relationship between what disability sport coaches do and how athletes with disabilities are affected, while also offering partial support for the associations identified in this literature. For example, the relationship between coaches’ autonomy-supportive behaviours and athletes’ motivation (Banack et al., 2011; Cheon et al., 2015) or coaches’ interpersonal skills and athletes’ perceptions of belongingness (Turnnidge et al., 2012; Shirazipour et al., 2017b). While several of these relationships are also evident in the literature focused on coaches of able-bodied athletes (e.g., Vierimaa et al., 2017), the findings of this study also highlight some distinct contextual differences specific to disability sport. Most notably, coaches were keenly aware of the capacity for disability sport to foster transferable life skills that contribute towards athletes’ independence and autonomy in everyday life, while also acting as a platform for equality at a broader social level (e.g., acceptance of disability; Cregan et al., 2007). Consistent with poetic representations of para-athletes’ views on successful coaching (Culver & Werthner, 2018), efforts to understand and empathize with athletes were also considered crucial to the coach-athlete relationship.

Understandings of coaching effectiveness in disability sport were further enhanced through the application of a socio-ecological lens (Brown et al., 2014). The
holistic vision offered by a socio-ecological framework has been proposed as a “valuable alternative to conceptualize how coaches could develop practice that more effectively meets the needs of diverse young people” (Jeanes, Magee, & O’Connor, 2014, p. 105) – or, in this context, persons with disabilities. These findings highlight the need to consider and integrate varied levels of influence into conceptualizations of coaching effectiveness in order to optimize the quality of athletes’ participation (e.g., Côté, Turnnidge, & Evans, 2014). By addressing these varied levels of influence, the findings of this study also have implications for the models of disability that underpin traditional coach education. Namely, the need to challenge medicalized views and consider the broader social-relational nature of disability (Townsend et al., 2016).

Methodologically, this study integrated innovative methods and multiple perspectives in order to triangulate perceptions of quality experiences in disability sport programs, and the coaches’ role in fostering such experiences. A collective case study enabled depth and particularity concerning what it means to coach effectively and shape quality experiences in disability sport, which was enhanced by the inclusion of varied data collection methods (i.e., document review, observation, and interviews) that represented the voices of both coaches and athletes (Hodge & Sharp, 2016). In terms of practical implications, the presentation of context-specific findings in Table 5, as well as the findings synthesized across cases in Table 6, highlight techniques and behaviours that can be integrated into the practices of disability sport coaches at across themes to target specific aspects of quality experiences, or quality participation more generally. These techniques and strategies may be used in the context of existing resources, such as the \textit{Blueprint for Building Quality Participation in Sport for Children, Youth, and Adults}.
with a Disability (Canadian Disability Participation Project, 2018) or a Transformational Coaching Workshop (Turnnidge & Côté, 2017) targeting disability sport coaches.

While the methodological contributions of this paper are important, they also come with several limitations. First, the depth achieved in each case was limited by the space allotted in the write-up. Each case yielded enough data to stand alone as an independent study, but was distilled into a relatively small portion of the overall findings. Furthermore, the specific procedures and amount of data collected varied across cases due to the challenges associated with research in naturalistic settings. In some cases, the first author was an active participant. In others, she passively observed from the sidelines. The degree of researcher participation was dictated by the preferences of the coach and the structure of the training session. Finally, the perspectives of participants in each case were acquired voluntarily (i.e., a convenience sample within each purposefully selected case). In particular, the athletes who chose to participate in an interview may have self-selected based on similar characteristics, views, or experiences.

Future directions reflect a continued need for research focused on disability sport coaches. Specifically, more research is needed to unearth the complex relationship between coaches’ knowledge and behaviours and athletes’ experiences and outcomes in the diverse array of extant disability sport contexts. The use of multiple voices, including those of coaches and athletes, and progressive methods, which may range from experimental interventions to innovative qualitative designs, will continue to push the boundaries of knowledge on what is already a broad and multifaceted topic. Moving forward, we can put what we know about effective disability sport coaching into practice in order to optimize the experiences of persons with a disability in sport.
5.7 References


Chapter 6

Narrative as a Learning Tool for Coaches of Athletes with a Disability:
Using Stories to Translate Research into Practice


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6.1 The Fit of Manuscript 4 within the Dissertation

Manuscript 4 falls within the ‘knowledge synthesis’ and ‘knowledge product development’ stages of the KTA framework. By synthesizing the data obtained in Manuscripts 1-3 alongside other relevant sources of knowledge (i.e., ‘knowledge inquiry’), this study presents an evidence-informed learning tool for disability sport coaches that demonstrates and provides information about effective coaching behaviours (i.e., behaviours that facilitate quality experiences for athletes with a disability). More specifically, this study contributes towards the overall purpose of the dissertation by taking what we know about quality participation and coaching effectiveness in disability sport and taking initial steps toward putting it into practice.
6.2 Abstract

The purpose of this study was to produce a novel evidence-informed learning tool for disability sport coaches. More specifically, the goal of this tool was to demonstrate and provide information about coach behaviours that facilitate quality experiences for athletes with disabilities. Using the Knowledge to Action Framework as a guide, an ethnographic creative nonfiction (i.e., evidence-informed story) was developed through a four-stage process: (a) identifying and creating primary sources of knowledge, (b) synthesizing primary sources of knowledge to select target behaviours and behavioural determinants, (c) crafting the story to demonstrate and provide information about target behaviours and related outcomes, and (d) obtaining feedback from stakeholders (i.e., disability sport athletes, coaches, and administrators) to adapt the tool to the local context. In total, 26 primary articles were identified and synthesized. Two behavioural determinants (confidence and attitudes) and 13 target behaviours, aligning with transformational leadership theory, were selected for inclusion. The tool was revised several times to incorporate stakeholder feedback, and a final version of the ethnographic creative nonfiction is presented. This paper offers a detailed procedure for translating evidence into a narrative format, strengthens theoretical understandings of coaching effectiveness in disability sport, and delivers a practical resource for coaches and coach educators in disability sport.
6.3 Introduction

Despite offering an array of potential benefits for individuals with disabilities (e.g., Slater & Meade, 2004), rates of sport participation are low (Sport England, 2017). By ensuring that people with disabilities are exposed to quality experiences in sport – that is, experiences that are positive, satisfying, and/or enjoyable (Evans et al., 2018) – the chance that a person will continue to participate in sport, and thus enjoy the potential benefits, is likely to improve (e.g., Caron, Sweet, Rocchi, & Martin Ginis, submitted; Martin, 2006). Provided that coaches play a key role in shaping the sport experiences of athletes with a disability, they represent an important point of intervention for enhancing the quality of athletes’ disability sport experiences (Allan, Evans, Latimer-Cheung, & Côté, submitted; Shirazipour et al., 2017; Turnnidge, Vierimaa, & Côté, 2012). The field lacks a standard, internationally accepted term for sport for persons with a disability; therefore, the term disability sport is used to represent all sport for participants with a disability (i.e., intellectual, cognitive, physical or sensory disability). Although there is a small but growing body of literature focused on disability sport coaches (see Martin & Whalen, 2014 for a review), very little has been translated into evidence-informed interventions that serve to develop coaches’ knowledge and practice. Consequently, there is an urgent need for knowledge translation to address the gap between research and practice among coach learners and educators in the disability sport context.

Several definitions of knowledge translation and related terms (e.g., knowledge exchange) exist in the literature (McKibbon et al., 2010). To address confusion and misunderstanding among these concepts, Graham and colleagues (2006) reviewed these terms and their corresponding definitions to produce a conceptual framework that
incorporates the key elements of Knowledge to Action (KTA) processes. The KTA framework includes two concepts: knowledge creation, which involves the refinement of primary studies into knowledge tools or products through the process of aggregating or synthesizing existing knowledge, and the action cycle, which is the process that leads to the implementation or application of knowledge. Taken together, KTA best reflects the definition of ‘knowledge exchange’ put forward by the Canadian Health Services Research Foundation: A collaborative problem-solving between researchers and knowledge users that involves interaction and results in mutual learning through the process of planning, producing, disseminating, and applying research\(^2\).

Using KTA as a guiding framework, the purpose of this study was to produce a novel evidence-informed learning tool for disability sport coaches that communicates best practices for facilitating quality experiences for athletes with disabilities. To date, few research-informed interventions targeting disability sport coaches has been reported in the literature. For example, Cheon, Reeve, Lee, and Lee (2015) evaluated the effects of a workshop delivered to Korean Paralympic coaches to teach autonomy-supportive behaviours. Athletes of coaches who participated in the workshop reported higher levels of motivation and won more Paralympic medals than athletes of coaches in the control group, demonstrating that coach training can have a positive effect on athletes’ outcomes. Considering the lack of formalized opportunities for coach education, current research suggests that the most dominant form of learning among disability sport coaches is informal in nature, involving experience in the field, mentorship, and communities of practice (Duarte, Culver, Trudel, & Milistedt, 2018). Thus, evidence-informed learning

\(^2\) See https://www.cfhi-fcass.ca/Home.aspx
tools for coaches of athletes with disabilities are sorely needed – not only for coach education, but for the potential to influence athletes’ experiences and outcomes (e.g., Allan et al., submitted).

The genre of representation chosen for the learning tool presented in this article is ethnographic creative nonfiction. An ethnographic creative nonfiction is a story grounded in research findings and composed using the techniques of fiction (Sparkes, 2002). This genre was chosen for its ability to deliver knowledge from a large body of literature in a detailed and evocative manner (Ellingson, 2009; Smith, Pathomas, Martin Ginis, & Latimer-Cheung, 2013). In doing so, ethnographic creative nonfiction offers a means of addressing the social relational nature of disability, and the embodied experience of disability sport coaching – dimensions that are often considered lacking or “thin” in the disability sport literature (Smith & Sparkes, 2012). Stories enable a “more memorable, more human and more understandable” approach to the evidence (Smith et al., 2013, p. 2047), which increases the knowledge translation potential of the research. When written to reflect everyday language and human experience, to engage emotion, stimulate imagination, and produce meaning, storied forms of research are accessible to knowledge users (e.g., coaches and coach educators) beyond simply the academic domain (Smith et al., 2013; Sparkes, 2002).

In the context of coach education, storied forms of research have been used sparingly as a tool for coach learning. One of the first and only examples lies in the work of Douglas and Carless (2008), who used stories to represent the experiences of elite female golfers in a seminar for golf coaches. After analyzing coaches’ written responses, they determined that coaches typically respond to stories by questioning, summarizing, or
incorporating the story into their own experiences. In a similar vein, Culver and Werther (2018) co-constructed poems to represent the voices of para-athletes on the topic of successful coaching. The findings from each of these studies suggest that storied forms of research hold potential as an effective coach learning tool (e.g., demonstrating personal reflection, engagement, and emotional connection; Douglas & Carless, 2008); however, in each of these cases, the stories and poems were based on research from a single dataset and were not developed explicitly for the purpose of coach education. While storied forms of research have been used to synthesize large bodies of work in other settings (e.g., promoting physical activity for individuals with spinal cord injury; Smith et al., 2013), none have taken a systematic approach to the development of an ethnographic creative nonfiction. This article outlines a rigorous, detailed, and systematic process for developing a story-based learning tool grounded in KTA, and the tool is subsequently presented.

6.4 Methods

Guided by the KTA Framework, an ethnographic creative nonfiction was developed through a four-stage process representing knowledge creation (see Figure 2). In the first three stages, relevant sources of knowledge were identified (i.e., knowledge inquiry), synthesized (i.e., knowledge synthesis), and used to generate an initial draft of the story (i.e., development of knowledge product). Subsequently, a fourth stage was included to tailor the product to the needs of potential users. During this stage, a panel of expert reviewers were asked to read the story and provide feedback. This feedback was incorporated into the story prior to unveiling a final version for dissemination and evaluation. Reporting upon the process, including stakeholder feedback, represents
secondary use of anonymous information. These activities do not fall within the scope of research ethics review as outlined in the Tri-Council Policy Statement (see www.pre.ethics.gc.ca).

Figure 2. A four-stage process for the development of an evidence-informed ethnographic creative nonfiction, guided by the Knowledge to Action Framework (adapted from Graham et al., 2006).

Stage 1: Knowledge inquiry. The objective of the first stage was to identify relevant sources of first-generation knowledge. This involved the completion of three primary studies (led by the first author), as well as a systematic search and review of the literature (see Grant & Booth, 2009). In total, three sources of data, encompassing 26 primary studies, were included: (a) athlete interviews \(n = 2\); Allan, Smith, Côté, Martin Ginis, & Latimer-Cheung, 2018; Allan et al., submitted), (b) coach observation and interviews \(n = 1\); Allan, Martin Ginis, Latimer-Cheung, & Côté, in preparation), and (c) articles identified through a systematic search and review of the literature \(n = 23\). A
brief description of these data sources is provided in Appendix I.

**Stage 2: Knowledge synthesis.** The objective of the second stage was to identify coach behaviours, and salient determinants of those behaviours, that have the potential to shape the quality of athletes’ experiences in disability sport. Across the three sources of data, 26 articles were synthesized. The following information was extracted from each article: (a) bibliographic citation, (b) objectives, (c) design, (d) description of participants, (e) coach variables, (f) athlete variables, and (g) coach-athlete processes. Coach and athlete variables represented any factor, feature, experience, outcome, or phenomenon targeted by the researcher, while coach-athlete processes referred to the relationship or mechanism linking coach and athlete variables. Aligning with the systematic search and review method, Stages 1 and 2 aimed to combine “the strength of a critical review with a comprehensive search process” to synthesize findings of greatest relevance or importance to the research purpose (Grant & Booth, 2009, p. 102). As such, the data extracted for coach variables, athlete variables, and coach-athlete processes were inductively coded to reflect coach behaviours that facilitate positive and negative experiences or outcomes for athletes, as well as antecedents of coach behaviours (i.e., factors that inform coach behaviours).

Provided that there was substantial overlap between inductive codes and the leadership styles outlined in the full range leadership model, the original codes were then deductively categorized into the dimensions of full range leadership. The full range leadership model is a comprehensive and established model of leadership built on decades of research in sport, education, business, and other settings (Avolio, 1999, 2011; Bass, 1998). The model describes three styles of leadership behaviours that fall along a
continuum from passive to active and non-leadership to effective leadership:

Transformational, transactional, and laissez-faire. A summary of articles included in the knowledge synthesis is available in Appendix J.

**Recommendations.** Behaviours coded within transformational leadership (TFL), the most active and effective leadership style within the full range leadership model, were selected for inclusion in the narrative learning tool. TFL represents a follower-centered approach to leadership, characterized by the use of empowering and inspiring leadership behaviours that serve to develop followers (i.e., athletes) into future leaders. TFL is most commonly divided into four dimensions (see Barling, 2014; Turnnidge & Côté, 2017): Individualized consideration (i.e., coaches show genuine care and concern for each athlete’s unique needs), intellectual stimulation (i.e., coaches encourage critical thinking and creativity by engaging athletes in the learning process), idealized influence (i.e., coaches gain their athletes’ trust and respect by acting as positive role models), and inspirational motivation (i.e., coaches inspire athletes with a compelling vision of the future by fostering perceptions of meaning and team unity).

Four reasons underpinned the decision to target TFL behaviours in the narrative learning tool: (a) the largest number of codes were captured within TFL; (b) codes within TFL were primarily associated with positive athlete experiences and outcomes; (c) resources for coach development generally lack a focus on interpersonal skills, such as those conveyed through TFL (Lefebvre, Evans, Turnnidge, Gainforth, & Côté, 2016); and (d) interpersonal coach behaviours are an important component of coaching effectiveness in disability sport (Allan et al., submitted; Allan et al., in preparation). In total, 13 leadership behaviours representing all four TFL dimensions were identified through the
knowledge synthesis and modelled in the learning tool (see Table 7).

Additionally, four determinants of coach behaviours were identified in the knowledge synthesis: knowledge, experience, confidence, and attitudes. Due the vast and extensive range of sport- and disability-specific knowledge that would need to be addressed in a learning tool for disability sport coaches, as well as the inability to offer direct experience in a narrative format, the decision was made to focus on coaches’ confidence (i.e., beliefs about capabilities) and attitudes (i.e., favourable or unfavourable evaluations of the behaviour and related outcomes). Low confidence and negative attitudes were often attributed to a lack of knowledge or experience (e.g., Hammond, Young, & Konjarski, 2014; Kozub & Poretta, 1998). Thus, an ethnographic creative nonfiction provided an opportunity to increase coaches’ confidence in their ability to coach athletes with disabilities and promote positive attitudes towards disability without the need for specific knowledge or experience in the disability sport context. Confidence was targeted by demonstrating similarities in coach behaviours used in able-bodied and disability sport contexts. Furthermore, athletes with disabilities were portrayed as warm (i.e., friendly) and competent (i.e., skilled) – constructs that are associated with positive stereotypes (e.g., Barg, Amstrong, Hetz, & Latimer, 2010), and relatedly, attitudes toward disability.

**Stage 3: Development of knowledge product.** The objective of the third stage was to craft an initial version of the ethnographic creative nonfiction. Grounded in the findings of the knowledge synthesis, the story needed to accomplish three things for disability sport coaches: (a) model the 13 TFL behaviours, (b) increase confidence in their ability to coach athletes with disabilities, and (c) promote positive attitudes toward
disability and disability sport. To assist with the process of coach learning, two behaviour change techniques (BCTs) were incorporated into the story. BCTs are strategies used to target behavioural determinants – in this case, confidence and attitudes – and enhance the likelihood of changes in behaviour (i.e., Michie, Johnston, Francis, Hardeman, & Eccles, 2008). As such, BCTs offered a useful mechanism for improving coaches’ use of TFL behaviours. Two BCTs were selected to accompany each of the 13 TFL behaviours: ‘demonstrating or modelling the behaviour’ and ‘providing information regarding the behaviour and/or outcomes of the behaviour’ (see Michie et al., 2013). Each of these BCTs represent established methods of changing both confidence and attitudes (Michie et al., 2008; Michie, van Stralen, & West, 2011). A list of the target behaviours is presented in Table 7, including where the behaviours are modelled and relevant information is provided.

To begin the writing process, key decisions regarding the setting, characters, and plotline first needed to be made. Drawing on literature included in the knowledge synthesis, the creative nonfiction was set in the context of a para-swimming club at the developmental competitive level (i.e., regional clubs or teams that compete against other regional entities and may include relatively inexperienced athletes as well as members of provincial or national teams; Allan et al., submitted). Para-swimming was one of the first sports practiced at the Paralympic Games, and continues to be one of the most popular and established sports for people with disabilities (International Paralympic Committee, n.d.). The developmental competitive setting was selected because it is ideally suited to the behaviours and determinants targeted by the creative nonfiction (see Allan et al., submitted); however, the knowledge and skills conveyed in the tool are arguably
important across disability sport contexts. Provided that disability sport training groups, clubs, or teams often constitute a diverse range of athletes – including male and female participants of varying ages, disability types, and levels of experience – athlete characters were developed to reflect the complexity and nuance of these differences, while drawing on existing narratives of athletes with disabilities for guidance (Allan et al., 2018). The plotline of the creative nonfiction was centered around an inexperienced coach, who initially lacks confidence in his abilities, learning from a mentor coach, who models the target TFL behaviours.

Subsequently, an iterative process of story writing was initiated. The first author used the findings of the knowledge synthesis to craft, edit, and re-craft each story using literary techniques (e.g., dialogue, language) designed to engage readers while conveying the evidence (Smith et al., 2013). Each story was constructed temporally to represent targeted situations within a single training session to communicate findings in a concise and resonant manner.
Table 7. Breakdown and location of target behaviours and behaviour change techniques in ethnographic creative nonfiction

<table>
<thead>
<tr>
<th>TFL Construct</th>
<th>Target Behaviour</th>
<th>Location of Behaviour Change Techniques in Creative Nonfiction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Demonstration of the behaviour (modelling)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Information about consequences (unspecified)</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>Showing interest in athletes</td>
<td>C1-P14</td>
</tr>
<tr>
<td></td>
<td>Recognizing roles and accomplishments</td>
<td>C1-P18</td>
</tr>
<tr>
<td></td>
<td>Demonstrating concern for athletes’ well-being</td>
<td>C1-P26</td>
</tr>
<tr>
<td></td>
<td>Providing individualized instruction/feedback</td>
<td>C1-P27, C4-P7</td>
</tr>
<tr>
<td></td>
<td>Listening to athletes</td>
<td>C1-P27, C1-P29</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>Providing options and choice</td>
<td>C1-P27, C3-P2</td>
</tr>
<tr>
<td></td>
<td>Providing opportunities for leadership</td>
<td>C2-P2</td>
</tr>
<tr>
<td></td>
<td>Eliciting athlete input</td>
<td>C2-P12, C2-P14, C2-P16</td>
</tr>
<tr>
<td>Idealized Influence</td>
<td>Showing vulnerability or humility</td>
<td>C3-P12</td>
</tr>
<tr>
<td></td>
<td>Discussing/modelling prosocial behaviours/values</td>
<td>C3-P16</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>Expressing confidence in athletes’ abilities</td>
<td>C1-P13, C2-P18, C3-P18, C4-P7, C4-P12</td>
</tr>
<tr>
<td></td>
<td>Discussing goals and expectations</td>
<td>C4-P4, C4-P9</td>
</tr>
<tr>
<td></td>
<td>Bringing the team together</td>
<td>C4-P12, C4-P16</td>
</tr>
</tbody>
</table>

*Note. C refers to the chapter number. P refers to the paragraph number within each chapter (not the creative nonfiction as a whole).*

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Stage 4: Tailoring knowledge to potential users. Once an initial draft of the creative nonfiction was completed by the first author, it was circulated to co-authors for review. The co-authors acted as critical friends who checked to ensure that the results of the knowledge synthesis and guiding theoretical frameworks were accurately represented within the story. The creative nonfiction was revised to integrate feedback until all co-authors agreed that the story was ready for review by a panel of stakeholders.

Subsequently, an updated version of the creative nonfiction was sent to a panel of reviewers with practical expertise in disability, sport, and coaching. These reviewers included two athletes with disabilities, three disability sport coaches, and two administrators within disability sport organizations who had experience overseeing coach education and development. Four of the seven reviewers were experienced as athletes, instructors, or coaches in the para-swimming context. Each of these individuals were asked to review the stories for accuracy and ability to engage readers, and subsequently provide feedback related to the suitability and format of the content (see Appendix K). After the first round of reviews, the creative nonfiction was revised to reflect feedback regarding the appropriateness of language used, the cohesiveness of the plotline, and the realities of the para-swimming context. A revised draft was sent out to both the co-authors and the panel of stakeholders for review. Following minor revisions to language and the execution of specific TFL behaviours, a final draft of the creative nonfiction was approved by all reviewers.

6.5 Results

What follows is an ethnographic creative nonfiction in the form of a short story. The story is divided into four chapters, each emphasizing a different TFL dimension:
Individualized consideration, intellectual stimulation, idealized influence, and
inspirational motivation.

Chapter 1: Individualized consideration. Logan stood uncertainly on the pool
deck at a community centre about an hour’s drive from his hometown. The air was warm
and humid, infused with chlorine and the laughter of small children in brightly coloured
life jackets. He couldn’t help but smile as youthful lifeguards shepherded them towards
eagerly waiting parents gathered around the change room doors. Across the pool, sunlight
streamed in through tall windows and danced over the surface of the water. A
combination of warmth, laughter, and sunlight invited him into the space, and still, Logan
felt uncomfortable.

The unexpected sound of bodies slicing into the water at the far end of the pool
startled Logan from his initial thoughts. He looked up to see two swimmers racing side-
by-side in the centre lanes. A woman stood behind the starting blocks, stopwatch in hand.
He quickly realized that she must be the coach he had come to meet. Before Logan could
make his next move, the swimmers had completed the turn and exploded off the wall
back in the direction of the coach.

Having swum competitively for most of his life, and now coaching at his local
club, he was impressed by the speed and technique of the swimmers. He watched as they
slid into the wall with outstretched arms, too close to call the first touch. The coach knelt
down beside them at the edge of the pool deck. After a brief exchange, she stood, waiting
as the swimmers pushed their way up and out of the pool. Although Logan was aware
that he would be observing a swim practice for athletes with physical disabilities, he was
initially surprised to notice that the first swimmer out of the water needed to grab a crutch
for support. Admittedly, he wasn’t really sure what to expect – but the skill of these
swimmers gave him the immediate impression that he may need to reconsider his initial
assumptions.

For a few minutes, the swimmers relaxed on the pool deck, chatting with one
another and the coach before hopping back into the pool for a slow cool-down set. With
her athletes occupied, the coach, Jamie, beckoned for Logan to join her at the deep end of
the pool.

“You must be Logan!” exclaimed Jamie, extending her hand toward Logan. “I’m
Jamie, head coach here at the Marlins Para-Swim Club.”

Logan reached out to shake Jamie’s hand. He was nervous, despite Jamie’s warm
welcome. “That’s me,” he replied. “Thanks again for having me at practice today. I heard
about your program from one of the swimmers in my club and found your contact
information on the Marlins website. I figured it would be worth it to send you a quick e-
mail, you know, to learn more about it. It was extremely generous of you to invite me out
to practice.”

Jamie gave Logan a knowing look. “It’s no problem. I often reach out to other
coaches for help. It’s a great way to learn! Because the disability sport community is
small, opportunities for coaches to learn from one another are important – especially
when you’re working with people who have unique needs and abilities” she explained.
“You mentioned in your e-mail that you might have someone with a disability joining
your team?”

Logan nodded. “Yeah, so, I’ve only ever coached able-bodied athletes, but I was
recently approached by an athlete with cerebral palsy who is interested in joining my
swim club. Her friends are on the team and she’s keen to participate, but I’m worried that I just don’t have the knowledge or skills to coach her well.”

“That’s understandable, but I think what you’ll realize today is that the knowledge and skills you already use still apply when coaching athletes with disabilities,” Jamie stated reassuringly. “It’s all about tailoring to the individual, providing athletes with ownership over their own participation, leading by example, and assisting athletes as they work towards reaching their overall potential.”

Logan reflected for a moment on what Jamie had to say. He’d been coaching able-bodied swimmers for several years – perhaps he was better equipped to coach para-swimmers than he’d originally thought? He still didn’t feel all that confident. Before he could linger on it any longer, his train of thought was interrupted by an unfamiliar voice.

“Jamie!” called the voice from across the pool deck.

“Sam!” Jamie replied enthusiastically, a smile spreading across her face.

Logan turned as a man in fitted swim shorts wheeled towards them from the accessible change room. A Team Canada backpack hung from the back of his chair.

“Welcome back!” Jamie continued, crouching down to meet Sam at eye level.

“How was your first training camp with the national team?”

“It was tough, which was to be expected, but I feel much more confident now that I’ve had the chance to train with other top-level athletes in my class,” Sam explained.

“That’s great. I knew you had it in you!” remarked Jamie, then turned her attention back toward the change rooms.

Using her right arm, a young woman held open the door for a teenaged boy using a walker. The woman’s left arm was missing from the elbow down. They walked across
the pool deck side-by-side, deep in conversation. As they approached the group, Jamie greeted them warmly.

“Alex, I heard you got into all of the programs you applied to for university next year. Congratulations!” Jamie said to the boy. Turning to the girl, she added, “And Taylor, nice work on the fundraiser you organized last week. It was a really great event.”

“Thanks Jamie,” the pair replied in unison, a look of satisfaction and mild embarrassment apparent on their faces.

“Now that you’re all here, there’s someone I’d like you to meet,” announced Jamie. “Logan coaches the swim team the next town over. He’s interested in learning more about the world of para-swimming, so I’ve invited him to join us at practice today.”

The athletes nodded affirmatively as Jamie spoke, and Logan smiled in return.

“Logan, meet Sam, Taylor, and Alex.” Jamie nodded toward each athlete in turn as she said their names. “Sam is training twice a day right now while he works toward the next Paralympic Games. Taylor and Alex join him for practice once a day after school. The two swimmers finishing up in the pool right now usually train with this group as well, but I brought them in early today to work on their starts. So, today it will just be these three.”

There was a brief silence after Jamie finished talking. Logan thought for a moment, then addressed the group. “I really appreciate all of you for welcoming me into your practice today. If you have any ideas for me, I’m all ears,” he offered.

Taylor smirked and glanced sideways at Alex and Sam. “We may be missing a few things, but I think we’re all good for ears,” she joked.

The athletes chuckled and Jamie smiled, content to see her athletes in good spirits.
Noticing the confusion on Logan’s face, she winked and said, “She likes to make jokes. You’ll get used to it.”

Still smiling, Jamie focused her attention back on the athletes. “Alright, that’s enough. It’s time for practice” she scolded, her smile betraying her words. She surveyed the group. “I know that you’ve all had a busy couple of weeks. How are you feeling today? Sam, let’s start with you.”

Although he still felt somewhat out of place, Logan’s nerves had begun to settle. Jamie and her athletes carried on like he was a natural extension of the group, accepting him into their space in the way that humour, nudges, and winks tend to do. Logan observed as Jamie addressed each athlete prior to practice. She listened attentively to each athlete’s updates or concerns, taking a moment to ask questions and offer suggestions until both coach and athlete had agreed on a plan of action for the day’s practice. For more experienced athletes like Sam, who claimed he was “drained” after training camp the previous week, Jamie took a more hands-off approach. She gave him three options: complete the workout as planned, complete a shortened version of the workout, or swim easy lengths of the pool. The choice was up to him. For novice athletes like Alex, Jamie took a more active role in modifying the practice plan. Alex complained of muscle stiffness, so Jamie reminded him to complete his regular stretches and range of motion exercises before getting in the pool, then asked him to check back in with her as the workout progressed. When Jamie got to Taylor – who “felt great!” – she held up her hand for a high five. Taylor returned the gesture, but had more to say.

“I was thinking that maybe today I could work on my flip turn?” Taylor wondered. “I feel really good about my open turns, and the faster I can turn, the faster I
can swim in my next race!”

“That sounds like a great idea,” Jamie answered. “I planned to work on turns with each of you after the warm up, and we can certainly make that happen.”

After addressing each of the athletes, Jamie asked them to drop off their flippers and kickboards at the end of their lanes before starting the warm-up. The coaches watched as Sam, Alex, and Taylor gathered their equipment. With a few minutes to think, Logan thought about his first ten minutes with the Marlins Para-Swim Club.

“You seem to have a really strong connection with your athletes,” he commented to Jamie.

“I make an effort to get to know them on a personal level,” she replied. “If I can show my athletes that I care about their lives outside of the pool, and recognize them for the things they accomplish not only as swimmers, but as people, then I can work towards building a sense of confidence and accountability that transcends their time as athletes.”

“And I suppose the more you know about each athlete, the easier it is to tailor their training and set them up for success,” remarked Logan.

“Exactly,” answered Jamie. “I like to work collaboratively with each athlete to develop practice plans and tailor training because they know themselves – physically and emotionally – better than anyone else. With their input, I can adapt training activities to meet the needs and goals of each athlete so that everyone feels included and challenged when they come to practice.”

Chapter 2: Intellectual stimulation. “All set,” called Sam, wheeling back towards Logan and Jamie with his teammates.

“Awesome. Let’s get going on the warm-up. Sam, would you mind taking Alex
and Taylor through the dryland exercises you learned while you were at training camp last week?” Jamie asked.

“No problem,” he replied, then signalled for Alex and Taylor to follow him to an open area on the pool deck.

Jamie stood and continued her conversation with Logan. “I try to develop the people in my program into strong mentors, leaders, and teammates,” she explained. “By providing them with opportunities for leadership, they’re able to learn from one another, develop new skills, and establish stronger roles and relationships both within and beyond the club.”

“I guess then you also get a break from coaching!” kidded Logan, but Jamie responded with a serious look.

“Quite the opposite!” she calmly countered, then explained, “When one of my swimmers takes the lead, I have more time to observe and work one-on-one with the other athletes in the group. It’s also a great opportunity for me to learn from the swimmers’ experiences with other programs and coaches.”

“That’s interesting,” Logan replied. “I never thought of it that way before. It actually sounds like a great way to make the most of your time during practice.”

“Exactly,” agreed Jamie.

After a brief pause, Logan asked, “So do you normally work one-on-one with your athletes? I noticed that you addressed each of them individually before practice, but you described them as a training group.”

“Whether I’m working with able-bodied athletes or athletes with disabilities, I do my best to engage each athlete in their own training by asking for their thoughts and
opinions,” Jamie began, then added, “That one-on-one time becomes especially important when I’m working with swimmers who have a diverse range of abilities. When I include athletes in the process, they make important connections that facilitate learning, and like I said earlier, gives them ownership over their own participation.”

Before Logan could respond, Jamie began walking towards the group of athletes warming up on the pool deck. As they spoke, she had kept her eyes on the swimmers, carefully observing their activities. Sam sat in his chair, verbaling instructing Alex and Taylor on the technical points of a double leg glute bridge. Alex and Taylor were lying on their backs, attempting to follow along as Sam talked them through it. Alex was having trouble maintaining the bridge position with his hips raised. Logan recalled that Alex had complained of muscle stiffness earlier in the practice, which likely affected his ability to perform the exercises.

Jamie asked Alex to relax, then laid down on the ground beside him. She mimicked his position, then said, “What am I doing wrong with this exercise?”

Alex scanned Jamie and answered, “Your hips are too low.”

“Right, so, based on what you learned from Sam, what can we do to make sure that my hips are in the right position?” asked Jamie.

“Umm…squeeze your butt?” Alex answered inquisitively.

“Yes! Squeeze the butt muscles!” Jamie exclaimed. “Can you show me what that would look like?”

Alex focused for a moment, then lifted his hips off the ground so that his body formed a nearly straight line from his shoulders to his knees.

“That’s great Alex,” praised Jamie. “Now, if you’re having trouble getting in or
out of that position, do you remember which stretches you can do to help relax those muscles?”

Alex nodded. Jamie gave him a ‘thumbs up’ and returned to a standing position.

“Feel free to jump in if you see anything the athletes need to work on,” she said to Logan.

“I don’t know,” he replied uncertainly. “I’m still not really sure that I know enough about their disabilities to offer any important feedback”

“Don’t think too hard,” Jamie assured him. “You’ve got the know-how. It’s no different than coaching any other athlete.”

Chapter 3: Idealized influence. After warming up on the pool deck, Jamie thanked Sam for his help and the swimmers transferred into the pool. Logan continued to shadow Jamie, observing and asking questions as the practice progressed. He helped out by keeping time for the athletes, and offered a few tips to help Taylor with her flip turn. Nearly an hour had gone by since Logan first arrived at the community center, but he’d barely noticed the time pass. When it came to the final set, Jamie motioned for Alex, Taylor, and Sam to gather around and listen. They looked up at her from the water, supporting themselves on the edge of the pool.

“Great work so far today everyone,” she began. “For the last set, you will have your choice of stroke, and I want you to think about a couple of things. First, I want you to think about your training and competition goals – which strokes do they involve? Second, what are the techniques or strokes that you feel you need to improve on the most?” She gave the swimmers a moment to think. “Sound good?” she asked.

The swimmers nodded collectively, their heads bobbing up and down above the
water.

“Alright, you’ll start on the 60,” Jamie instructed, and counted down until the first athlete pushed off from the wall.

Once all three swimmers had begun the set, Logan looked over at Jamie. “Is it important to let the athletes choose which stroke they want to work on? I sort of thought that was the coach’s job,” he questioned.

“Yes and no,” Jamie responded. “I have a general plan for the training group, and I individualize it for each athlete. For example, Sam has shorter recovery times than the other two, and Alex swims a shorter distance. Although they might all be doing different things or swimming different distances, I try to tweak it so that they are all finishing each set at the same time, and in that way, doing the workout together. That said, I want to show them that I trust in their decisions by handing some of the decision-making power over to them. They also tend to enjoy training more when, at least some of the time, they get to pick the things they like.”

Logan nodded in acknowledgement, and the two coaches fell silent as they observed the swimmers in the pool. Jamie offered words of encouragement as the set wore on, and occasionally prompted the swimmers with cues for technique. Halfway through the set, Taylor came to an abrupt stop at the end of the pool. Rather than complete the turn and push off for another length, she tore the goggles off her face and threw them angrily onto the pool deck. She clung to the edge of the pool, visibly upset and heaving to catch her breath.

“Would you mind keeping the time for Sam and Alex?” Jamie asked, turning to face Logan as she knelt down beside Taylor.
Jamie waited for Taylor to calm down. After a few minutes, Taylor raised her eyes enough to meet Jamie’s gaze.

“Want to tell me what happened?” Jamie inquired, her voice soft.

Taylor took a deep breath, looked down and back up again, then replied, “I never saw myself as an athlete, but ever since I joined the team, I’ve just been getting faster and faster. Every practice. Every race. My times get faster every time I get in the pool. But for the last few practices, I just can’t seem to keep it up. I’ve been slowing down in the workouts, and I don’t know how to stop it from happening. I want to be an athlete and I want to compete, but how can I do that if I can’t be fast?”

Jamie nodded empathetically. “I remember back when I used to compete, I used to push myself so hard – just like you are now. I would swim best times in training on a regular basis, but I could never really make it happen in a race. And you know what happened? I got a cold – right before a big race – and my coach refused to let me train. I was so angry, but after a few days of rest, I was able to race… and guess what? I swam a best time. The problem all along was that I was pushing my body too hard and not giving myself enough time to rest.”

“But I only swim a few times a week,” Taylor mumbled. “Sam swims twice a day and he doesn’t have this problem.”

“Ah, but the difference between the two of you is that he’s been training for several years, and you’ve only been at it for a few months,” Jamie explained. “Plateaus are a normal part of the process. You need to listen to your body, and trust that with proper training and rest, you’ll eventually see the results you want.”

Taylor gave Jamie a small smile and sighed. “Okay. Thanks, Jamie,” she said.
“It’s okay to be frustrated,” offered Jamie. “Just remember that even through you’re relatively new to the team, you’re a role model for the younger swimmers. And as a general rule, we do our best to support our teammates and approach our training with positive attitude.”

“Got it,” Taylor replied.

“I know you do,” said Jamie, standing to clap as Sam and Alex approached the wall to finish the set. When both swimmers had come to a full stop, Jamie addressed the group.

“Congratulations on making it through a tough workout!” she exclaimed, smiling widely at each one of them. “How did it feel?”

“Good,” huffed Sam.

“Hard,” panted Alex.

“It looked hard!” Logan asserted, having fulfilled his timing duties.

Jamie laughed, but before she could respond, Taylor surprised her.

“I’m sorry I got upset. I hope I didn’t interrupt your workouts,” she said, facing Sam and Alex while she supported herself on the edge of the pool with her full arm.

“Don’t worry about it,” Alex responded.

“Yeah, it happens to the best of us!” chipped in Sam.

Looking satisfied, Jamie thanked the athletes for being so kind and understanding with one another. Logan listened intently as the athletes thanked Jamie in return for allowing them to make mistakes, sharing her own mistakes, and instilling the values that make the club feel like such a safe and inclusive space for learning. After Jamie instructed the swimmers to complete a few easy lengths, Logan looked over at her.
“I’d be hard-pressed to see the teens in my club offer an apology like that,” said Logan.

Jamie smiled ruefully. “Sometimes all they need is a gentle reminder,” she replied. “They know that it’s okay to make mistakes, and that having respect for their teammates is a core value of the club. With a little nudge in the right direction, they know what to do.”

A few more minutes passed. The coaches watched as the swimmers made their way up and down the length of the pool. Jamie looked pensive, then turned to face Logan one more time.

She said, “See, all you have to do is be yourself. Share your stories, model your values, treat people well – and you will set a great example for any athlete.”

**Chapter 4: Inspirational Motivation.** One by one, the swimmers finished cooling down. Jamie moved Sam’s wheelchair closer to his lane when he asked for help with his transfer, and Logan followed suit by placing Alex’s walker at the end of the ramp leading in and out of the pool. Back on the deck, the athletes towelled off and gathered their things. Jamie busied herself putting away equipment, and Logan waited patiently nearby to thank her and the swimmers before it was time to leave. When Sam, Taylor, and Alex were ready to go, Jamie and Logan joined the group.

“Only one practice left before the first meet of the season,” Jamie announced, sounding more excited than serious. “So, I have some homework for you…”

Jamie paused. The athletes looked at one another and then her.

“I want you to think back to the goals you set for yourself at the first practice of the year, and then think about everything you’ve done since then. You should have a
pretty good idea of the times you’ll be able to swim,” Jamie instructed. “So, for your homework, I want you to think about one aspect of your stroke or technique that you can improve on in order to make those times. Any questions?”

Alex raised his hand, and Jamie nodded in acknowledgement.

“How do we know if we’re focusing on the right thing?” he asked.

Jamie smiled and answered, “I’ll meet with each of you individually before next practice to discuss those goals and your race plans, but I’m confident that each of you have the ability to figure out one thing that will make your stroke better. Sound good?”

Sam, Taylor, and Alex nodded in agreement.

“Good,” Jamie continued. “And one last thing. I expect each of you to support one another at the meet next weekend. That’s my goal for the team – that when you’re not racing, you’re helping one another work towards reaching your individual goals.”

“That can be arranged,” replied Sam.

“Sounds good to me,” echoed Alex and Taylor.

“Awesome. Again, great work today everyone. It was a tough practice, but I’m positive that you’re all in great shape heading into the first meet,” Jamie declared. “Let’s bring it in.”

Sam, Taylor, Alex, and Jamie put their hands together in the middle of the circle. Logan stood awkwardly on the fringe until Taylor gave him a nudge.

“You were part of the group today too,” she said, and motioned towards his hand. Logan added his hand to the top of the stack.

“Marlins on three,” called Jamie. “One-two-three-”

“MARLINS!” came the collective response.
After saying their goodbyes, the athletes made their way towards the change rooms.

“Sam, call me in the morning to let me know if you’re feeling recovered enough to practice again tomorrow!” Jamie called out after them. “And Alex, keep me posted about school – I’m here if you need a sounding board. Have a great evening you three!”

Before taking his own leave, Logan thanked Jamie for allowing him to shadow her at practice. “Thanks again for everything today,” he began. “I mean, everything I’ve learned today applies just as much to my able-bodied athletes as it will to my new para-swimmer.”

“You’re absolutely right,” replied Jamie. “There are some obvious differences, but in the end, the process is the same. They’re all athletes. And behind each athlete, there’s a person.”

Logan thought for a moment. “I think one of the biggest lessons I’ve learned today is that the athlete is a great resource,” he stated. “I might know a lot about the sport, but she’s an expert in her own disability. We can work together to adapt training and address her needs.”

“Exactly. You can discuss goals and expectations with para-athletes the same way you would with any other athlete. When you believe in them, they’re more likely to believe in themselves, and in turn they’ll be more likely to experience success,” Jamie affirmed.

Logan went on, “I also think it’s important to make sure every athlete feels like a part of the team, regardless of their ability.”

“Definitely,” agreed Jamie.
“I felt nervous as an outsider coming in and working with your team today, but I felt more and more comfortable every time you and your athletes included me – whether it was a joke or a team cheer,” Logan explained.

“I’m glad you felt that way,” Jamie replied. “And just remember that you’re welcome to get in touch anytime if you have questions or need help.”

Logan looked Jamie in the eye, a grateful look on his face. “I’m sure I will take you up on that,” he said. “But in the meantime, I’m excited to welcome a new athlete to the team!”

6.6 Discussion

An ethnographic creative nonfiction that aims to demonstrate and provide information about coach behaviours that facilitate quality experiences for athletes with disabilities was distilled from a diverse body of literature into a detailed and concise format that is intended to be both meaningful to and accessible for multiple audiences. Using the KTA framework as a guide, the methods presented in this article demonstrate a rigorous and systematic process for translating a body of evidence into narrative form. This method can be used as a template for the development of evidence-informed narrative resources that benefit not only coaches, but other learners as well. Thus, the methodological contributions of this paper extend beyond the coach education context to reflect a novel and innovative approach to evidence-informed educational resources more broadly.

Douglas and Carless (2008) were the first to use storied forms of research as a pedagogical tool for coach learning, and despite promising findings, the genre has received little uptake in the coach education literature. That being said, story-based
learning tools have been used more prominently, and proven to be effective, in other settings. For example, short stories have been used to communicate the physical activity guidelines to individuals with spinal cord injuries (Smith et al., 2013), and to deliver health evidence to parents of children with croup (Hartling et al., 2010). In each of these cases, participants found the narrative format enjoyable and valuable for conveying health information (Hartling et al., 2010; Smith, Tomasone, Latimer-Cheung, & Martin Ginis, 2014). Alternatively, researchers have shown that narrative forms of communication are effective for changing behaviour in the areas of education (e.g., promoting school engagement; Rosario et al., 2016) and health promotion (see Perrier & Martin Ginis, 2016 for a review). Considering the potential for narrative forms of research to increase learner engagement and change learner behaviour, BCTs may be used to enhance the behaviour change process (Michie et al., 2008; Michie et al., 2011). By identifying target behaviours and the determinants of those behaviours, relevant BCTs were incorporated into this story – a first for the genre of ethnographic creative nonfiction – to optimize coaches’ learning potential.

The evidence synthesized through the development of the ethnographic creative nonfiction highlights the importance of coaches’ interpersonal behaviours for ensuring that athletes are exposed to quality experiences in disability sport. Coaching effectiveness involves the integrated and contextually-appropriate application of intrapersonal, interpersonal, and professional behaviours to produce positive athlete experiences and outcomes (Allan et al., submitted; Côté & Gilbert, 2009). The story developed through this work fills a crucial gap in coach education by addressing the need for learning opportunities focused on coaches’ interpersonal skills (Lefebvre et al., 2016; Turnnidge
& Côté, 2017), while extending theoretical knowledge of effective disability sport coaching. For example, TFL was used to represent coaches’ interpersonal behaviours in the disability sport literature. TFL has been recognized for its potential benefits and emphasis on follower development in a variety of settings (see Turnnidge & Côté, 2016), but has yet to be promoted as a framework for disability sport coach leadership.

While the result of this study is a practical tool that is readily available for coaches and coach educators, the KTA framework offers clear next steps for enhancing the utility of the ethnographic creative nonfiction (see Graham et al., 2006). The first two stages of the action cycle – adapting knowledge to local context and assessing barriers to knowledge use – can be targeted with continued feedback from relevant stakeholders (e.g., disability sport coaches and coach educators). As the story is further refined, the next stage involves selecting, tailoring, and implementing interventions. For example, the story could be integrated into an existing workshop that teaches TFL behaviours to coaches (e.g., Turnnidge & Côté, 2017; Vella, Oades, & Crowe, 2013). Opportunities for dialogue between workshop participants and facilitators upon engagement with the story could aid in the process of narrative authentication, thus providing learners with richer and more realistic contexts in which to apply knowledge and practice skills (Petraglia, 2009). By combining the story with other styles of intervention, there is also an opportunity to integrate additional BCTs (see Michie et al., 2013). The final stages of the action cycle include monitoring knowledge use (e.g., assessing changes in coaches’ confidence, attitudes, or behaviours), evaluating outcomes (e.g., evaluating the quality of athletes’ experiences), and sustaining knowledge use, thus resetting the action cycle. To ensure that the tool is grounded in the best available knowledge and optimized for use
among coaches of athletes with disabilities, these steps represent an important future direction.

The opportunity to re-engage with the action cycle will be particularly important for the ethnographic creative nonfiction presented in this paper due to the limitations associated with its development. Provided that the body of literature focused on disability sport coaches is relatively small, the systematic search and review was kept broad. As such, the literature included in the review encompassed a diverse range of topics, methods, foci, and outcomes. As the field continues to grow, future reviews will be needed to create or revise knowledge products that accurately reflect the current state of research. In order to do this, more research is needed on the topic of disability sport coaching, and in particular, on the relationship between coach behaviours and athlete outcomes in disability sport. In conclusion, this paper outlines a systematic approach for translating knowledge from the academic world into an accessible format for disability sport coaches. Provided that stories have the potential to engage coaches and teach behaviours that will improve the quality of athletes’ experiences in disability sport, the ethnographic creative nonfiction presented in this paper represents a novel and innovative tool for developing coaches and enhancing athletes’ disability sport participation.
6.7 References


Chapter 7
General Discussion

The overarching purpose of this dissertation was to explore and enhance participation in disability sport by understanding and optimizing the role of the coach. Guided by the Knowledge to Action (KTA) framework (Graham et al., 2006), four studies were performed with the following aims: (a) to explore the meanings attributed to disability sport participation among persons with disabilities over time (Manuscript 1); (b) to examine the role of coaches in shaping athletes’ disability sport participation across development, and thus enhance understandings of coaching effectiveness in disability sport (Manuscripts 2-3); and (c) to create an evidence-informed learning tool for disability sport coaches that aims to promote quality disability sport participation (Manuscript 4). In this section, I present a summary of the findings (7.1); highlight the strengths (7.2) and limitations (7.3) of this dissertation; discuss the theoretical, methodological, and practical contributions of this work (7.4); indicate directions for future research in the areas of athlete, development, quality participation, and coaching effectiveness in disability sport (7.5); and finally, offer conclusions (7.6).

7.1 Summary of Findings

The first dissertation study used a narrative approach to explore the meanings that athletes with physical disabilities attribute to their participation in disability sport over time. Five narrative types were identified, representing different developmental trajectories and experiential aspects of disability sport participation. Athletes drew on existing narratives of disability (i.e., restitution, quest; Smith & Sparkes, 2005) and sport involvement (i.e., performance, discovery, relational; Douglas & Carless, 2006) to frame
these narrative types, and the core of each narrative type was formed by the specific meaning or value associated with disability sport participation (e.g., sense of purpose, social acceptance). Finally, the need to feel equal and value reflected a common theme across narrative types influencing the quality of athletes’ participation in disability sport. These findings both support and extend existing conceptualizations of disability sport participation (e.g., Hammel et al., 2008; Martin Ginis, Evans, Mortenson, & Noreau, 2017), while building on the limited body of literature concerned with para-athlete development. In particular, the resulting narrative types offer support for the six experiential elements of participation identified through Martin Ginis and colleagues’ (2017) review of the participation literature, while offering a temporal perspective – inherent within a narrative approach – that revealed the dynamic fluctuations of each element over developmental contexts and time.

The second dissertation study complements the findings of Manuscript 1 by exploring athletes’ perceptions of how coaches shaped their experiences in disability sport throughout development. Provided that coaches have been identified as a key social agent in creating quality disability sport experiences (Evans et al., 2018; Shirazipour, Evans, et al., 2017; Shirazipour, Aiken, & Latimer-Cheung, 2017a, 2017b; Turnnidge, Vierimaa, & Côté, 2012), this study aimed to illuminate the voices of athletes with disabilities while improving our understanding of how coaches create quality experiences in disability sport. Using thematic analysis, patterns in coaches’ knowledge, beliefs, and behaviours were captured in five themes. Three themes were discussed in relation to positive experiences in disability sport (consideration, collaboration, professionalism), while the remaining themes were related to negative disability sport experiences.
(prejudiced coaching, passive coaching). Contextual differences in how themes can be balanced to create quality experiences for athletes from recreational to high performance participation were also identified. The findings of this study were used to contextualize Côté and Gilbert’s (2009) coaching effectiveness definition – derived from a review of the literature in mainstream sport settings – for use in disability sport. Considering the paucity of literature concerning with disability sport coaching effectiveness, this study filled important knowledge gaps while offering practical implications for disability sport coach development.

Building on theoretical knowledge of quality participation and coaching effectiveness obtained from Manuscripts 1 and 2, the goal of the third study was to examine how model disability sport coaches (i.e., coaches with a recognized ability to foster quality disability sport experiences) shaped successful programs for athletes with disabilities. A collective case study of six disability sport programs, representing varied sport types and contexts, was performed to triangulate what constitutes quality experiences in disability sport, and the coaches’ role in fostering these experiences. Varied data sources, including both coach and athlete perspectives, were analyzed for each case. Martin Ginis and colleagues’ (2017) experiential elements of participation were fostered in each case, although the specific elements targeted by coaches differed. The philosophies and practices of model disability sport coaches were embedded more broadly in a socio-ecological framework (e.g., Bronfenbrenner, 1979; Côté, Turnnidge, & Evans, 2014), reflecting four layered themes: coaching philosophy, coaching style, learning environment, and broader vision for the program or disability sport – each with the capacity to foster a distinct (group of) element(s). Patterns in the behaviours used by
coaches to target specific elements at each level help to explicate the relationship between coaches’ behaviours and athletes’ experiences, while highlighting important contextual considerations (see Côté & Gilbert, 2009). Taken together, this study enhances theoretical insight into coaching effectiveness and quality participation in disability sport, while extending the methodological depth of the disability sport coaching field.

The fourth and final study synthesizes the primary knowledge acquired through Manuscripts 1-3 alongside relevant literature focused on athlete development and coaching in disability sport in order to produce an evidence-informed learning tool for disability sport coaches. More specifically, the goal of this tool was to demonstrate and provide information about coach behaviours that facilitate quality experiences for athletes with disabilities. While Manuscripts 1-3 represent the knowledge inquiry stage of knowledge creation in the KTA framework, Manuscript 4 encompassed the knowledge synthesis and knowledge product development stages. The first stage of the action cycle – adapting knowledge to local context – was also included by incorporating feedback from stakeholders (i.e., athletes, coaches, administrators) in disability sport. As such, the remaining stages of the action cycle represent important next steps for the dissemination and evaluation of this resource (see Graham et al., 2006). In addition to delivering a practical tool for use by disability sport coaches and coach educators, this paper presents a rigorous and systematic process for translating evidence into a narrative format, and makes novel connections between theories of coaching and leadership in disability sport (e.g., transformational leadership: Barling, 2014; Turnnidge & Côté, 2017).

7.2 Strengths

The primary strength of this dissertation lies in the methodological approaches
employed to achieve the individual objectives of each study and the overall purpose of the dissertation. The strengths of these approaches were particularly salient considering the depth and significance of the knowledge gaps addressed within these objectives. For example, prior to the work presented in this dissertation, no studies had explicitly examined the concepts of quality participation or coaching effectiveness in disability sport (e.g., Evans et al., 2018). Furthermore, only one example of an evidence-informed intervention designed to improve coach behaviours and enhance athletes’ outcomes could be found in the literature focused on disability sport coaches (Cheon, Reeve, Lee, & Lee, 2015). These knowledge gaps exist despite extensive lines of research on these topics in able-bodied sport settings (see Côté & Gilbert, 2009; Gilbert & Trudel, 2004; Lefebvre, Evans, Turnnidge, Gainforth, & Côté, 2016 for reviews). Through comprehensive and innovative forms of qualitative analysis, spanning multiple data sources and perspectives across the first three dissertation studies, the findings of these studies not only aid in filling voids within the disability sport literature, but also strengthen conceptual relationships within and across theories (i.e., quality participation, coaching effectiveness). Provided that disability sport constitutes a small yet diverse community of coaches and athletes, the use of multifaceted qualitative approaches also allowed an in-depth exploration of what are often unique and highly individualized phenomena (Smith & Perrier, 2014). The ability to capture these experiences, and represent them in a format intended to resonate with multiple audiences (i.e., ethnographic creative nonfiction; Sparkes, 2002), offers a critical opening for the advancement of the field – in terms of both research and practice.

Notably, KTA offered a valuable framework within which innovative
methodological approaches could be used to fill knowledge gaps and strengthen theoretical connections through the data accumulated in each paper (Graham et al., 2006). In relation to quality participation and coaching effectiveness in disability sport, the capacity to produce a learning tool for coaches (see Manuscript 4) grounded in the findings of Manuscripts 1-3 demonstrates significant theoretical progress and meaningful practical implications for disability sport coaches and coach educators. Provided that there are few opportunities for formal and nonformal learning in the context of disability sport coaching (see Duarte, Culver, Trudel, & Milistedt, 2018 for a review), the ability to apply knowledge from each of these studies – particularly in the form of a readily available resource – represents a valuable contribution to the field of disability sport coaching. Furthermore, the representation of athletes with disabilities’ voices throughout the research process (Manuscripts 1-3) and within the final product (Manuscript 4), in addition to the perspectives of disability sport coaches (Manuscripts 3-4), signifies an important step forward in terms of engaging disability sport research with the field of disability studies (e.g., Culver & Werthner, 2018; Townsend, Smith, & Cushion, 2016). By framing this dissertation within social-relational and human rights perspectives on disability, the goal was to challenge traditional notions of impairment while progressing the field.

7.3 Limitations

This dissertation is a qualitative exploration of quality participation and coaching effectiveness in disability sport, represented primarily through the perspectives of athletes with disabilities and disability sport coaches. This exploration resulted in the development of an ethnographic creative nonfiction intended to enhance the quality of
athletes’ disability sport experiences through the optimization of coach behaviours. Nonetheless, there are some important limitations to address.

First, while this dissertation has the capacity to provide naturalistic and theoretical generalizations (e.g., Stake, 1995), the transferability of these findings may be limited by the sample of participants represented across the four dissertation studies. Although the term disability sport was defined as sport for participants with physical, cognitive, and visual disabilities, the vast majority of participants in this study lived with physical impairments. Manuscripts 3 and 4 encompassed the perspectives of some individuals and literature representative of other types of impairment; however, the findings of this dissertation may not be fully transferable beyond sport for persons with physical disabilities. In addition to the type of impairment, the findings of this dissertation may also be limited by the lack of racial diversity among participants. Nearly all of the participants included in this dissertation self-identified as white, which may generally reflect the broader context of disability sport in Canada (i.e., the context in which this work was conducted). Furthermore, the athletes included in Manuscripts 1-3 may have self-selected into the study because their experiences in disability sport were largely positive. Thus, this dissertation is missing the critical perspectives of individuals who may have had negative experiences or dropped out of disability sport. Finally, the experiences of participants were highly individualized and context-specific. Although efforts were made to contextualize the findings to the extent possible, some of the nuance and specificity is lost when findings are grouped into narrative types, patterns, or themes (Sparkes & Smith, 2014).

Second, one of the primary methods of data collection for this dissertation was
semi-structured interviews. Semi-structured interviews enabled a flexible approach to
data collection, while maintaining the focus of the research. However, considering my
positionality as a female, educated, able-bodied researcher, a number of potential barriers
existed within the interview process (Sparkes & Smith, 2014). For example, the majority
of participants in this study were male, lived with a disability, and represented a variety
of socio-economic backgrounds. As such, participants may have consciously or
unconsciously been selective or restrictive regarding the information they chose to share
with me. Furthermore, interviews were conducted across a variety of mediums (i.e., in
person, over the phone, computer-mediated). When interviews were not conducted in
person, the potential for missing context may have been an issue. Although phone and
computer-mediated interviews were necessary considering the widespread geographical
locations of participants recruited for this study, inconsistency and inability to consider
visual cues may have limited the findings (Cachia & Millward, 2011).

A third factor that may have limited the findings of this dissertation was the
potential for ontological tension between the ‘story-analyst’ and ‘story-teller’ positions
taken in Manuscripts 1 and 4, respectively (see Smith & Sparkes, 2006). While the
analyses in Manuscripts 1-3 were grounded in relativist approach, the approach taken to
synthesize and represent information in Manuscript 4 – particularly with its focus on
‘ideal’ or ‘optimal’ behaviours – may have reflected a more realist method. As
demonstrated within the objectives of each dissertation study, further tensions exist
between the questions of ‘what is’ quality participation and coaching effectiveness in
disability sport and ‘what can’ quality participation or coaching effectiveness in disability
sport do or become over time (Smith & Sparkes, 2006). In other words, the difference
between a discrete understanding of the concept and an acknowledgement that the concept is fluid, dynamic, and subject to change (or to produce change) over time.

7.4 Contributions

**Theoretical contributions.** The findings of this dissertation make important theoretical contributions in the areas of quality participation and coaching effectiveness in disability sport. Specifically, Manuscripts 1 and 3 broaden our understanding of the elements that constitute quality disability sport experiences, and subsequently, quality disability sport participation – as well as how these elements function over time and across developmental contexts. In doing so, these findings support existing conceptualizations of participation (e.g., Hammel et al., 2008; Martin Ginis et al., 2017) originally developed from literature in rehabilitation settings. Furthermore, while there is a growing body of research focused on disability sport coaches, this literature remains limited in size and scope (e.g., Duarte et al., 2018). In particular, few studies exist to explain the effect of coach behaviour on the quality of athletes’ experiences, or explicitly target effective disability sport coaching (Martin & Whalen, 2014). By contextualizing Côté and Gilbert’s (2009) coaching effectiveness definition for use in disability sport, Manuscripts 2 and 3 make significant theoretical advances on the topic of effective coaching in disability sport. In addition, the application of socio-ecological frameworks in Manuscript 3 (e.g., Bronfenbrenner, 1979; Côté et al., 2014) and leadership theories in Manuscript 4 (e.g., Barling, 2014; Turnnidge & Côté, 2017), extend and illuminate the theoretical complexity of the topic. Finally, the application of social-relational and human rights perspectives on disability addresses limitations stemming from other dominant models of disability (e.g., medical, social, and biopsychosocial) and advances disability
Methodological contributions. Provided that innovative methodological approaches represent one of the foremost strengths of this dissertation, this program of work makes a number of methodological contributions. For example, narrative approaches are used to inform both a process (Manuscript 1) and product (Manuscript 4) across the dissertation. Papathomas (2016) describes the transition from story-analyst to story-teller as an “innovative strategy” to “push the boundaries of what narrative inquiry can be” in sport research (para. 21). While Manuscript 1 offers evocative representations of common narratives reflecting the developmental trajectories and participation of para-athletes (which offer unique dynamic and temporal perspectives in and of themselves), Manuscript 4 outlines a detailed and systematic process for the development of story-based learning tools. As such, the methodological contributions of this dissertation lie not only in the rich, temporal representations of complex phenomena, but also in the steps provided to aggregate and refine knowledge for the purpose of meaningful and widely-accessible representation (e.g., Smith, Papathomas, Martin Ginis, & Latimer-Cheung, 2013). Furthermore, the inclusion of multiple data sources and perspectives across the four dissertation studies is relatively novel in the disability sport literature. In particular, the presence of individuals with disabilities’ perspectives across the four dissertation studies offered an important contribution in terms of engaging this work with the field of disability studies (Culver & Werthner, 2018; Townsend et al., 2016). Finally, the assumptions that underpin the research presented in this dissertation are explicitly articulated and efforts to ensure methodological rigour are employed, thus offering a cohesive and sound interpretation of the data, with meaningful applications for research
Practical contributions. The practical contributions of this dissertation are inherent within the application of the KTA framework (Graham et al., 2006). Most notably, the findings of Manuscripts 1-3 were synthesized alongside relevant literature to produce a knowledge product in Manuscript 4. This product is available for use by coaches and coach educators in the disability sport context, although a number of future directions exist to enhance the feasibility and impact of the product (e.g., the action cycle, Graham et al., 2006). Additionally, the findings presented in this dissertation have implications for disability discourse in the sport domain. The narratives of disability sport participation presented in Manuscript 1, and the adoption of a social-relational perspective on coaching athletes with a disability in Manuscripts 2 and 3, challenge traditional notions of impairment. In doing so, these studies offer practical alternatives for how disability can be represented and understood in forums such as the media (e.g., Silva & Howe, 2012) and coach education (e.g., Townsend et al., 2016). Finally, the strategies and behaviours used by coaches to promote quality experiences for athletes with disabilities – identified and discussed in Manuscripts 2-4 – can be applied directly within coach education and practice.

When viewed holistically, the contributions of this dissertation have important implications for social justice in the sport domain. Recent calls within sport psychology (e.g., Schinke, Stambulova, Lidor, Papaioannou, & Ryba, 2016) and research with disability sport athletes (e.g., Smith, Bundon, & Best, 2016) have emphasized the significance of understanding sport participation in terms of social justice, and through this work, coaches may also be understood as key actors in working towards socially just
sport participation. While sport in and of itself may replicate, or even exaggerate, power structures and inequities that exist more broadly in society, the findings of this dissertation suggest that we can do work that will promote social justice in sport. From challenging the medicalized discourse that dominates how disability is represented and understood in the sport context, to the development of a resource for coaches with the potential to enhance participation in disability sport, this dissertation takes preliminary steps towards equitable sport participation for persons with disabilities.

7.5 Future Directions

This dissertation provides an important foundation for future research examining quality participation and coaching effectiveness in disability sport, as well as research employing knowledge translation processes and products. That being said, the research presented in this dissertation is only a starting point. Moving beyond the question of ‘what is’ quality participation and/or coaching effectiveness in disability sport, more research is needed to explore how these concepts interact with broader social and cultural contexts and impact the lives of persons with disabilities. While this dissertation employed innovative qualitative methodologies and methods, the application of rigorous quantitative designs (e.g., longitudinal questionnaire studies, intervention evaluation) may offer a complementary approach to further test theoretical relationships and advance our understanding of these topics. Provided that the bodies of literature focused on disability sport participation and coaching are relatively limited, there is a general need for more research in these areas; however, the findings of this dissertation suggest that we may not need to ‘reinvent the wheel’. We can draw on more established bodies of literature, such as social participation (e.g., Martin Ginis et al., 2017), positive youth
development (e.g., Holt, 2016), and mainstream sport coaching (e.g., Côté & Gilbert, 2009), to inform future studies and optimize the knowledge translation potential of the research. In terms of knowledge translation, the processes involved in KTA can also be used as a guide for future research (Graham et al., 2006). Considering the recommendations provided above, continued knowledge inquiry and synthesis can be used to develop additional products and tools that aim to enhance participation and coaching in disability sport (e.g., quality checklists for disability sport organizations, workshops for disability sport coaches). Furthermore, existing products – such as the ethnographic creative nonfiction presented in Manuscript 4 – can be moved through the stages of the action cycle to improve the overall impact and engage in the process of knowledge translation.

7.6 Conclusions

Despite the potential benefits for individuals with disabilities and society more broadly, research focused on quality participation in disability sport, including the factors that create quality experiences for para-athletes throughout the lifespan, is limited. In particular, despite being recognized as a key social agent influencing the quality of athletes’ disability sport participation, we know little about how coaches create quality experiences for athletes with disabilities. In light of these knowledge gaps, the findings of this dissertation enhance our understandings of athlete development, quality participation and coaching effectiveness in disability sport. With the intention to translate this knowledge into practice, the development of an evidence-informed coach learning tool aids in broadening the limited educational resources available for coaches of athletes with disabilities. As we continue to expand the knowledge base concerned with participation
and coaching in disability sport, we may work towards mobilizing this knowledge to increase both the quantity and quality of disability sport participation, and thus ensure that more people with disabilities are enjoying their fundamental human rights.
7.7 References


Lefebvre, J. S., Evans, M. B., Turnnidge, J., Gainforth, H. L., & Côté, J. (2016). Describing and classifying coach development programmes: a synthesis of


Appendix A

Manuscripts 1-3 Ethics Approval Letters
January 29, 2015

Miss Celina Shirazipour  
Ph.D. Candidate  
School of Kinesiology and Health Studies  
Queen's University  
28 Division Street  
Kingston, ON, K7L 3N6

Dear Miss Shirazipour:

RE: Amendment for your study entitled: GPHE-181-14 Exploring Sport Participation among Individuals with Physical Disabilities; ROMEO# 6014309

Thank you for submitting your amendment requesting the following changes:

1) To change the role of Miss Celina Shirazipour from Principal Investigator of the project to Co-investigator;
2) To change the role of Dr. Amy Latimer-Cheung from Co-investigator to Principal Investigator;
3) To add Dr. Jean Côté to the project as Co-investigator;
4) To add Dr. Blair Evans to the project as Co-investigator;
5) To add Ms. Veronica Allan to the project as Co-investigator;
6) To revise the purpose of the study to focus solely on understanding quality sport participation;
7) To recruit and conduct interviews with 20 veterans with physical disabilities involved in sport;
8) To revise the interview guide to remove a number of questions and modify the remaining question;
9) To provide participants with a $30 gift certificate to their choice of Starbucks or Amazon;

By this letter you have ethics clearance for these changes, and the Romeo file has been updated accordingly.

Good luck with your research.

Joan Stevenson, Ph.D.  
Chair  
General Research Ethics Board

c.: Dr. Amy Latimer-Cheung, Supervisor  
Dr. Jean Côté, Dr. Blair Evans, Ms. Veronica Allan, Co-investigators
May 19, 2015

Dr. Amy Letimer-Cheung
Associate Professor
School of Kinesiology and Health Studies
Queen's University
KHS Building
28 Division Street
Kingston, ON, K7L 3N6

Dear Dr. Letimer-Cheung:

RE: Amendment for your study entitled: CPHE-181-14 Exploring Sport Participation among Individuals with Physical Disabilities; ROMEO# 6014309

Thank you for submitting your amendment requesting the following changes:

1) To amend the purpose of this study to reflect a broader focus concerning various sub-groups of individuals with physical disabilities;

2) To recruit 40 young adults (ages 18 to 34) with congenital or early-acquired physical disabilities to examine their experiences as youth participating in adapted sport programs;

3) To recruit the new sample of participants through adaptive youth sport and para-sport organizations at various levels (e.g., Canadian Paralympic Committee, ParaSport Ontario) using e-mail circulation;

4) To ask each participant to take part in a two-part interview following the same procedure outlined in the current ethics application; however the temporal plot and subsequent questions will not focus on sport experiences pre- and post-injury, but rather the lifespan experiences of the participants;

5) Appendix A: Letter of Information and Consent Form (v. 2015/05/15);

6) Appendix B: Demographic Questionnaire (v. 2015/05/15);

7) Appendix C: Interview Guide (v. 2015/05/15);

8) Appendix D: Recruitment Emails (v. 2015/05/15).

By this letter you have ethics clearance for these changes.

Good luck with your research.

Sincerely,

Joan Stevenson, Ph.D.
Chair
General Research Ethics Board

cc: Dr. Jean Côté, Dr. Blair Evans, Ms. Celina Shirazipour, and Ms. Veronica Allen, Co-investigators
April 10, 2017

Ms. Veronica Allan
Ph.D. Candidate
School of Kinesiology and Health Studies
Queen's University
28 Division Street
Kingston, ON, K7L 3N6

GREB Ref #: GSKHS-254-17; TRAQ # 6020670
Title: "GSKHS-254-17 Exploring the Factors that Shape Athletes' Experiences in ParaSport"

Dear Ms. Allan:

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled "GSKHS-254-17 Exploring the Factors that Shape Athletes' Experiences in ParaSport" for ethical compliance with the Tri-Council Guidelines (TCP 2014) and Queen's ethics policies. In accordance with the Tri-Council Guidelines (Article 6.14) and Standard Operating Procedures (405.001), your project has been cleared for one year. You are reminded of your obligation to submit an annual renewal form prior to the annual renewal due date (access this form at http://www.queensu.ca/traq/simon.html; click on "Events", under "Create New Event" click on "General Research Ethics Board Annual Renewal/Closure Form for Cleared Studies"). Please note that when your research project is completed, you need to submit an Annual Renewal/Closure Form in Romeo/traq indicating that the project is 'completed' so that the file can be closed. This should be submitted at the time of completion; there is no need to wait until the annual renewal due date.

You are reminded of your obligation to advise the GREB of any adverse event(s) that occur during this one year period (access this form at http://www.queensu.ca/traq/simon.html; click on "Events", under "Create New Event" click on "General Research Ethics Board Adverse Event Form"). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example, you must report changes to the level of risk, applicant characteristics, and implementation of new procedures. To submit an amendment form, access the application by at http://www.queensu.ca/traq/simon.html; click on "Events", under "Create New Event" click on "General Research Ethics Board Request for the Amendment of Approved Studies". Once submitted, these changes will automatically be sent to the Ethics Coordinator, Ms. Gal Irving, at the Office of Research Services for further review and clearance by the GREB or GREB Chair.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Sincerely,

[Signature]

John Freeman, Ph.D.
Chair
General Research Ethics Board

c: Dr. Amy Latiere-Chung and Dr. Jean Côté, Supervisors
Ms. Jennifer Turneridge and Dr. Kathleen Martin Ginis, Co-investigators
Dr. Lucie Lévesque, Chair, Unit REB
May 15, 2017

Ms. Veronica Allen  
Ph.D. Candidate  
School of Kinesiology and Health Studies  
Queen's University  
28 Division Street  
Kingston, ON, K7L 3N6  

Dear Ms. Allan:  

RE: Amendment for your study entitled: GSKHS-254-17 Exploring the Factors that Shape Athletes' Experiences in Parasport; TRAQ # 6920670  

Thank you for submitting your amendment requesting the following changes:

1) To include semi-structured interviews with athletes on recruited parasport teams. At the end of the final mobile interview session with each coach, the lead researcher will invite athletes to participate in a semi-structured interview. Interviews be scheduled within two weeks of the final mobile interview session with the team’s coach, be scheduled at the preferred time and location of the participant, may include phone interviews, and will last approximately 30 minutes;

2) New Letter of Information for Athletes and Parents/Guardians (athlete interviews only) (v. 2017/05/05);

3) New Consent Form for Athletes and Parents/Guardians (athlete interviews only) (v. 2017/05/05);

4) New Interview Guide for Athletes (v. 2017/05/05);

5) Revised Coach Letter of Information (v. 2017/05/09);

6) Revised Coach Consent Form (v. 2017/05/09).  

By this letter, you have ethics approval for these changes.  

Good luck with your research.

Sincerely,

[Signature]

John Freeman, Ph.D.  
Chair  
General Research Ethics Board

c.: Dr. Amy Latimer-Chung and Dr. Jean Côté, Supervisors  
Ms. Jennifer Tumridge and Dr. Kathleen Martin Ginis, Co-investigators
Appendix B
Manuscripts 1 and 2 Recruitment E-mails
Dear (name of contact from organization),

I am a doctoral candidate from Queen’s University aiming to explore the participation experiences of young adults with physical impairments as a youth athlete. I would appreciate your help in recruiting young adults with physical impairments for retrospective interviews by circulating the following e-mail among members of your organization.

Thank you for your help and support,

Veronica Allan  
PhD student  
Queen’s University  
E-mail: 7vra@queensu.ca  
Phone: 613-533-6000 ext. 78207
Hello,

I am a doctoral candidate from Queen’s University aiming to explore the participation experiences of young adults with physical impairments as a youth athlete. I would appreciate your help in expanding researchers’ understanding of your experiences in sport and your community throughout your personal development.

If you are a young adult between the ages of 18 and 24 with a physical impairment, please consider participating. In order to be eligible for this study, you must have a congenital physical disability or a physical impairment acquired before the age of 8. Additionally, you must have some experience (i.e., a minimum of one sport season) participating in adaptive or parasport prior to the age of 18.

**The study will include:**
- A two-part interview (part one: ~ 30 minutes; part two: ~ 1 hour)
- An opportunity to discuss results (optional)

**Compensation:**
- As a thank you for your participation, you will receive a $30 gift card to your choice of Starbucks or Chapters and Indigo bookstores.

If you are interested in participating, please contact Veronica Allan (7vra@queensu.ca or 613-533-6000 ext. 78207).

If you know someone else who is eligible for participation and may be interested, please consider forwarding this e-mail.

Thank you,

Veronica Allan
PhD student
Queen’s University
E-mail: 7vra@queensu.ca
Phone: 613-533-6000 ext. 78207
Appendix C

Manuscripts 1 and 2 Letter of Information and Consent Form
PARTICIPANT LETTER OF INFORMATION AND CONSENT FORM

Title of the study: Exploring sport participation among individuals with physical disabilities

You are being asked to participate in a research study conducted by Dr. Amy Latimer-Cheung, Dr. Jean Côté, and Veronica Allan from the School of Kinesiology and Health Studies at Queen’s University. Results obtained from this research study will contribute to the completion of a doctoral degree. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines and Queen’s University policies.

Purpose of the Study
The purpose of this study is to explore the retrospective views of sport participation among young adults with physical disabilities. These findings will provide an initial exploration of the participation needs perceived by young adults throughout their development as a youth athlete.

Procedures
If you volunteer to participate in this study, you will be asked to take part in two private interviews with one of the researchers, Veronica Allan. During this interview, you will be asked questions regarding your views on sport participation. The first interview will be approximately 30 minutes and the second interview approximately 1 hour. Interviews will be recorded using a digital audio recording device. After the research team has completed an analysis of the interviews from all the participants, you will have the opportunity to comment on the results.

Potential Risks
There is the possibility that discussing your experiences may be emotionally distressing. If this is the case, you will be referred to a local clinic or phone line through the Canadian Mental Health Association (http://www.cmha.ca/get-involved/find-your-cmha/).

Potential Benefits
As a participant, you will be making important contributions to research knowledge of sport participation for youth with physical disabilities, and to our understanding of the needs of these individuals. We cannot guarantee that you will receive any direct benefits from the study.

Eligibility
To be eligible for this study, you must be between the ages of 18 and 24 and have a congenital physical disability or a physical impairment acquired before the age of 8. Furthermore, you must have some experience (i.e., a minimum of one sport season) participating in adaptive or para-sport prior to the age of 18.

Compensation
Each participant will receive a $30 gift certificate to either Starbucks or Amazon.
Confidentiality
While the results from this study will be published and presented at conferences, any information that can lead to your identification will remain confidential to everyone except the research team. Direct quotations from the interviews will be used during the presentation of results; however, each interview participant will be given a pseudonym to conceal his or her identity. The letters of information and consent will be secured in a locked office, which can only be accessed by the above-mentioned researchers. The audio recordings of interviews will be stored on a password-protected computer in Dr. Jean Côté’s lab.

Right to Withdraw
Participation is voluntary. You can choose to withdraw until publication of the results without any consequences by contacting Veronica Allan. You may also refuse to answer any questions without penalty.

Subsequent Use of Data
This data may be used in the future to promote sport participation among youth with physical disabilities.

Questions
If you have any questions or wish to receive any additional information regarding this research, please contact Veronica Allan at 7vra@queensu.ca. Any ethical concerns regarding this study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6000 ext. 74025.

Dr. Amy Latimer-Cheung
Associate Professor
Queen’s University
School of Kinesiology & Health Studies
613-533-6000 ext. 78773
amy.latimer@queensu.ca

Dr. Jean Côté
Professor and Director
Queen’s University
School of Kinesiology & Health Studies
613-533-6601
jc46@queensu.ca

Veronica Allan
PhD Student
Queen’s University
School of Kinesiology & Health Studies
613-533-6000 ext. 78207
7vra@queensu.ca

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Consent to Participate

I have read the information provided above for the study entitled “Exploring sport participation among individuals with physical disabilities” and understand the terms of my participation. I have had the opportunity to ask questions, which have been answered to my satisfaction. I consent to participate in the study described above, recognizing that I may withdraw my consent and withdraw from the study at any time. I understand that a copy of this form will be sent to me for my records via my preferred method of communication (indicated below).

_________________________  _______________________
Signature of Participant       Date

I agree to allow my interview to be audio-recorded (please circle one):  YES  NO

I have carefully explained the nature of this research study to the participant; and certify that, to the best of my knowledge, the participant clearly understands the nature of the study, the requirements of participating, benefits, and any risks involved in his or her participation.

_________________________  _______________________
Signature of Researcher       Date
Participant Contact Information

Note: To assure confidentiality, your contact information will be stored separately from all other materials.

Name: _________________________________________________

Phone Number: __________________________________________

Email Address: __________________________________________

Home Address: ___________________________________________

Preferred Method of Communication (Please Circle One):

E-mail          Mail

I am willing to participate in this study beyond the interviews, by reviewing and commenting upon the themes identified by researchers in the data analysis, and comparing them to my own experiences (Please Circle One):

Yes               No

_______________________________                     ___________________________
Signature of participant                                                Date
Appendix D
Manuscripts 1 and 2 Demographic Questionnaire and Interview Guide
Demographic Questionnaire

1. Gender: ___________________ OR Do not wish to specify: ______

2. Age: ______________________ OR Do not wish to specify: ______

3. Ethnicity (circle one):
   - White
   - Native Canadian
   - Black
   - Asian
   - Other: ________________
   - Do not wish to specify

4. Total years of sport experience: ______
   a. If disability is acquired:
      i. Years of sport experience pre-injury: ______
      ii. Years of sport experience post-injury: ______
   b. Participation in youth sport (prior to age 18) (circle one): YES NO
      i. If yes, years of sport experience prior to age 18: ______

5. Below, there are a few standard questions about the nature of your physical disability, specifically the type of disability. You can skip any questions that you do not feel comfortable responding to.
   a. If Congenital or Hereditary:
      i. Type: ___________________________
      ii. Cause: ___________________________
      iii. Areas of the body affected: ___________________________
   b. If Acquired:
      i. Type: ___________________________
      ii. Cause: ___________________________
      iii. Areas of the body affected: ___________________________
      iv. Age when disability was acquired: ______
Interview Guide

Session 1

Now that we have had the chance to go through the information letter, would it be okay if we began the interview? During this session, we will construct a timeline of your sport experiences from your earliest involvement in sport through to the present. During this process, I would like to know that I may, at any time, ask you related questions that are relevant to the information you provide me. These questions will mainly be related to the sport activities you include on the timeline. That being said, you may add in any information that you think is pertinent at any point in time. Do you give me permission to audio record this interview?

Please keep in mind that during our second interview, we will spend more time discussing the specific sport participation experiences that you perceive as most meaningful to your development in sport. Thus, the timeline we create today will be used as a guide to facilitate the next session.

For interviews conducted via Skype: After this session, I will send you an electronic copy of the timeline we create. Feel free to make any edits or additions before we meet again.

To start this interview, I’m interested in the different sport activities you have participated in throughout your lifetime.

[Using a large piece of paper and a marker, begin structuring timeline by helping participant place key landmark points in time onto the timeline – both in terms of key sport-related changes as well as other key transitions in their lifetime more generally. From their first athletic experience, participants will then place each of the different activities that were undertaken along the line. The timeline will continue from their first sport experience to the current day and participants will be asked to describe each activity. An example timeline will be on hand for participants to have an idea of the final product.]

Interview questions listed on next page.
Throughout (and following) construction of the timeline, the interviewer will ask the following questions:

1. For each sport activity:
   a. Can you tell me more about this activity?
      i. How often did you take part in this activity?
      ii. How many hours per week did you take part per session?
      iii. At what (competitive) level were you involved?
      iv. What were the reasons you began this specific activity? What were the reasons you stopped participating in this activity [if participation was ceased at any point]?
      v. How did participation in this activity make you feel?
   b. In a few words, how would you characterize the nature of your relationship with the coach in this activity? [Prompt the athlete to respond with descriptive words: E.g., positive, negative, supportive, inspirational, controlling, ambivalent, neutral, etc.]

2. In what ways were you involved in less formal sport and physical activity – led by yourself or your peers?

3. In addition to these sport activities, were you involved in any other activities - for example, artistic endeavours?

4. Considering the sport activities we have discussed:
   a. What activities mean the most to you?
      i. For each activity:
         1. What aspects made it meaningful?
         2. Can you describe them?
   b. What activities mean the least to you – those activities that were either negative or simply weren’t satisfying for you?
      i. For each activity:
         1. What aspects of these activities made them less meaningful to you?
         2. Can you describe them?

To conclude the interview, the participant will be asked to verify that the timeline is a complete and accurate representation of his or her life-course sport experiences. For interviews conducted via Skype, the interviewer will construct a final version of the timeline and send it to the participant electronically for verification. Edits and additions can be made at any time leading up to the second interview.
Interview Guide

Session 2

Are there any changes or additions you would like to make to the timeline before we begin our second interview? In our last session, you indicated that [list most meaningful activities identified in first interview] was/were the most meaningful to you, and [list least meaningful activities identified in first interview] was/were the least meaningful to you. Do you still feel this way? If not, what has changed? During this session, I will ask you about the activities you consider most and least meaningful to your sport experiences. These questions will focus largely on how you were engaged in each activity, the surrounding environment, relationships within this environment, and the outcomes you associate with your sport participation. Again, do you give me permission to audio record this interview?

1. Before we begin, can you tell me a little bit about your motivation for getting involved (and staying involved, if that’s the case) in sport?

Section A: Environment

1. For each activity confirmed as most or least meaningful:
   a. How would you describe the physical environment of [activity]?
      i. What was ideal about it? In other words, what were the physical characteristics of this environment that facilitated your participation?
      ii. What was missing from this environment to make it ideal?
      iii. Can you describe any challenges or barriers that you faced in this environment?
      iv. If you were put in charge of this activity, what changes would you make to create a more ideal environment?
   b. How would you describe the social environment of [activity]?
      i. What was ideal about it? In other words, what were the physical characteristics of this environment that facilitated your participation?
      ii. What was missing from this environment to make it ideal?
      iii. Can you describe any challenges or barriers that you faced in this environment?
      iv. If you were put in charge of this activity, what changes would you make to create a more ideal environment?

2. Thinking about your experiences in these sport activities as a whole:
   a. What are the overarching or prominent characteristics of these environments that facilitated your participation or made your involvement meaningful?
   b. What were the most common challenges or barriers you faced to participation in these sport environments?
3. Of the sport activities we have discussed, which of these involved a formal coaching role? For each activity that involved a formal coach:
   a. How was the coach of this activity involved in shaping the sport environment, if at all?
      i. Was the coach able to facilitate access or remove barriers to the physical environment, such as the training venue or equipment, in any way?
      ii. Similarly, was the coach able to facilitate access or remove barriers to the social environment – for example, fostering opportunities for teambuilding or social events outside of training?
      iii. Alternatively, did the coach contribute to any barriers – physical or social – in the sport environment?

Section B: Relationships*

1. Who would you consider to be the most influential person in shaping your sport participation and why?
   a. Who else influenced your sport participation? [Prompt participant to think about key influences: Family, friends, teammates, coaches].
2. If coaches have not yet been identified: Thinking about the individuals who have coached you throughout your sport participation experiences, who would you consider to be the most influential coach and why?
   a. Did any other coaches influence your sport participation?
3. Now, on the flip side, could you describe any individuals who had a negative influence on your sport participation? Why?
4. If coaches have not yet been identified: Can you describe any negative experiences with coaches, such that you felt your sport participation was adversely affected?
5. How would you describe an ideal relationship in sport?
   a. With a coach?
   b. With other athletes?
   c. With family?
   d. With friends?
   e. With administrators (i.e., from governing sport organizations)?

*For each of the ‘Section B’ questions listed above, the following prompts may be used:
   a. Can you describe your relationship with this person?
      a. What was his or her role in your sport participation or development as an athlete?
      b. How did your relationship with this person impact your involvement in sport, for better or for worse?

Section C: Engagement

1. For each activity confirmed as most or least meaningful:
   a. How would you describe what it feels like to be ideally involved or engaged in this sport activity?
i. Physically? Psychologically?
ii. What stands out about it?
iii. What are the elements or characteristics of this activity that contribute to these feelings – positive or negative?
b. Can you describe any experiences when you have not felt ideally involved or engaged in this activity?
   i. What are the conditions that contribute to this unsatisfying or less-than-ideal engagement?
c. In what ways have you been accepted into the sport community surrounding this activity?
   i. Can you describe this feeling of acceptance?
   ii. Who was involved?
   iii. How did this impact your participation?
d. Alternatively, was there ever a time when you did not feel accepted into this sport activity?
   i. Can you describe this experience?
   ii. Who was involved?
   iii. How did this impact your participation?

2. Considering the activities you have identified as most and least meaningful to your participation in sport, what would you describe as an ideal opportunity to be involved in sport?
   a. To what extent would you consider yourself ideally involved in sport throughout your timeline?

Section D: Outcomes

1. Looking back on your timeline, what would you consider to be the benefits of your participation in sport? [Prompt: Physical? Psychological? Social? Other?]
   a. What were the immediate benefits of your involvement in sport (e.g., after a single game or practice? 
   b. Can you describe any significant gains or improvements?
   c. How did these benefits or gains change over time?
2. In comparison, were there any drawbacks?
   a. Can you describe any losses or setbacks?
   b. How did these losses or setbacks change over time?
   c. Did these drawbacks have any long-term impact on your sport participation? If so, how?
3. If you were to fast-forward to the end of your sport career (or if you have already reached this point), what do/did you see yourself getting out of your sport participation in the long term?

Section E: Closing Questions

1. What did your participation in these activities mean to you?
2. Thinking about your sport experiences as a whole:
   a. What were the most valued elements of your sport experience?
b. What impacted your sport experience the most?
3. Let’s imagine you are given the opportunity to build an ideal adaptive sport program for youth with no limitations on what you could do.
   b. Can you describe it to me?
   c. If building this ideal sport program involved an educational component for coaches, what would be the most important elements to include in this coach training?
   d. If you were to give advice to a new coach entering this program, what would you tell this person?
4. Are there any elements of your sport experience that have not been covered in our interviews?
5. Is there anything touched upon that you would like to further discuss?
6. Do you have anything you would like to add or any questions that I can address?

To conclude, I would like to thank you for your time and patience today. As reminder, you have the right to withdraw until publication of the findings.
Appendix E

Manuscripts 1 and 2 Supplemental Methods
**Sampling and Participants**

Once ethical approval had been obtained from the institutional review board, participants were recruited using maximum variation and criterion-based purposive sampling strategies (Sparkes & Smith, 2014). While maximum variation sampling enabled a broad range of perspectives concerning the factors that comprise or shape participation in sport activities, criterion-based sampling ensured that participants shared certain attributes that made them eligible for this study. Specifically, we sought the views of men and women, 18 years of age or older, with congenital and acquired disability types and experience (i.e., a minimum of one sport season) participating in sport. Sport was further operationalized to include competition and/or training for the purposes of competition in individual or team sports at any competitive level, from recreational to elite. Diversity in perspectives across the sample allowed for a comprehensive and holistic interpretation of the narratives constructed by current and former athletes who live with a physical disability (Sparkes & Smith, 2014).

Participants were recruited from disability sport clubs and organizations across Canada either directly or indirectly via e-mail (i.e., athletes were contacted directly or club representatives were asked to distribute the study information to athletes meeting the inclusion criteria). Twenty-one people met the criteria for inclusion and agreed to participate, including 9 women and 12 men ranging in age from 19 to 73 ($M = 33.7, SD = 14.5$). Nearly all of the participants identified as Caucasian, while one participant indicated that she was biracial. Approximately one-third of the sample was comprised of individuals with congenital physical disabilities, such as cerebral palsy, spina bifida, and muscular dystrophy ($n = 6$). The remaining participants included individuals with
acquired physical disabilities, including amputation, spinal cord injury, and other impairments ($n = 15$). On average, participants had been involved in sport for 20.8 years ($SD = 15.0$), with a range of 2 to 54. Past and current participation in disability sport ranged across a variety of sport types, including individual (i.e., adapted waterskiing, boccia, hand-cycling, para-alpine, para-archery, para-athletics, para-nordic, para-rowing, para-swimming, para-triathlon) and team sports (i.e., power wheelchair hockey, sitting volleyball, sledge hockey, wheelchair basketball, wheelchair curling, wheelchair rugby), from recreational to elite levels.

**Data Collection**

Having agreed to participate in the study and provided written consent, each participant took part in a two-part retrospective life history interview (e.g., Adriansen, 2012; Smith, Bundon, & Best, 2016). By asking participants to describe and reflect on their life in relation to both their impairment and their experiences in sport, these interviews provided a comprehensive and qualitatively rich dataset. When possible, interviews were conducted in person at the preferred location of the participant ($n = 7$). However, provided that participants were recruited from locations all over Canada (including one participant who lived in the United Kingdom at the time of the interview), several interviews were performed over the phone ($n = 4$) or using online interfaces such as Skype ($n = 10$). Comparisons between face-to-face and telephone interviews have demonstrated that both modes of interviewing enable rich interview data and capture a similar level of detail (Cachia & Millward, 2011).

In the first session, the interviewer and participant worked collaboratively to co-create a physical timeline of the participant’s sport involvement (see Adriansen, 2012).
Using banner paper and writing utensils, the participant either recorded or guided the researcher in recording the specific sport activities (including frequency, duration, and competitive level), important moments, and major life transitions or milestones experienced by the participant relative to his or her sport involvement throughout the life course. For interviews conducted in person, this timeline was retained and used as a tool to facilitate recall and stimulate discussion during the second interview (Adriansen, 2012). Alternatively, the timeline was converted into an electronic format (i.e., typed into an excel document) and e-mailed to the participant to be verified and used a reference during the online or phone interviews.

The second interview session was conducted within two weeks of the first, allowing time for the participants to reflect on their sport timeline. During the second session, participants were invited to share stories about their experiences in disability sport. Additionally, an open-ended interview guide was used to elicit key information concerning the activities, relationships, environments, and outcomes associated with key sport experiences represented on their timeline (Côté, Turnnidge, & Evans, 2014). For example, participants were asked questions such as: “What would you consider to be an ideal sport environment?” “Who would you consider to be the most influential personal in shaping your sport involvement?” “How did you feel when you were engaged in [sport activity]?” and “What were the most valued elements of your experiences in sport” The interview guide was adapted from the work of Shirazipour et al. (2017), which explored the quality of physical activity experiences among military veterans with physical disabilities. Follow-up questions or probes were used to supplement the
interview guide and elicit rich data, providing opportunities for explanation and elaboration (Sparkes & Smith, 2014).

First session interviews ranged in duration from 23 to 72 minutes ($M = 42$ minutes), while second session interviews were typically longer than the first and ranged from 56 to 118 minutes ($M = 85$ minutes). On average, 127 minutes (approximately two hours) of audio was recorded per participant across the two-part interviews.

**Data Analysis**

A dialogical narrative analysis (DNA) “studies the mirroring between what is told in the story – the story’s content – and what happens as a result of telling that story – its effects” (Frank, 2010, p. 71-72). Accordingly, a DNA was performed to extend analytical interest beyond only the content of the interviews or the narrative resources used to structure the participants’ stories; specifically, this form of analysis enabled an in-depth examination of how stories act on and for the participants (Smith, 2015). To begin, all interviews were audio recorded and transcribed verbatim. Throughout the research process, reflective notes and memos were recorded to progressively identify stories and develop themes that contributed to the overarching narratives that were constructed from the data (Sparkes & Smith, 2014). Data from both the first and second interview sessions were used to inform the analysis.

Working towards the development of ideal narrative types – clearly defined and distinct narratives, each of which convey a unique meaning in relation to the participants’ experiences – the following steps were used to guide the analysis: (1) Indwelling, (2) identifying narrative structure and resources, and (3) identifying narrative themes and thematic relationships (see Lieblich, Tuval-Mashiach, & Zilber, 1998; Smith, 2015). In
order to familiarize and immerse oneself in the data, a period of indwelling was carried out. Indwelling involved reading over the interview transcripts while listening to the corresponding audio recordings and writing down preliminary notes (Smith, 2015). The objective of the second step was to sketch out a prototypical life course or structure for each participant, representing the framework for what would eventually become a series of distinct narrative types (Lieblich et al., 1998). The holistic structural analysis of each participant’s story involved first identifying the thematic foci (i.e., factors comprising or influencing participation in disability sport) and dynamics of the plot (e.g., direction – stability, decline, or progress; tone – positive or negative; language – at a ‘turning point’ or ‘crossroads’), followed by the narrative resources that may have been used to help structure the story. Once a structural framework had been developed for each unique narrative type present within the data, the final step was to examine the thematic content of each typology. Taking a more in-depth look at the thematic foci of each narrative, the factors that shaped athletes’ experiences in disability sport were examined for common threads or patterns over the course of each story or narrative type (Lieblich et al., 1998; Smith, 2015). To complete the DNA, we asked the question: So what? More specifically, why are similarities and differences within and between narrative types important with respect to the issue of quality participation?

Throughout the analytical process, the technique of analytical bracketing was used to focus separately and exclusively on structure (i.e., how the narrative was constructed over time) and content (i.e., what was told in the narrative). According to Smith and Sparkes (2012), researchers cannot focus on what is told in the story and how the story is structured at the same time – it is simply too demanding. As such, analytical
bracketing allowed for a back and forth movement between structure and content; by first focusing on the structure of each narrative and subsequently returning to each narrative with a thematic lens, similarities and differences between participants could be viewed according to the narrative typologies that were constructed as a whole (e.g., Perrier, Smith, Strachan, & Latimer-Cheung, 2014). This approach enabled a more profound understanding of the meanings participants attached to their experiences in disability sport.

**Evaluating the Research**

Consistent with ontological relativism and epistemological constructionism, a flexible list of criteria was developed to evaluate this research (Sparkes & Smith, 2014). In other words, the criteria for judging the quality of this qualitative research are not universal or concrete, but rather can be drawn from a dynamic list of traits that characterize the unique qualities of this research (Smith & Deemer, 2000; Sparkes & Smith, 2014). Lieblich and colleagues (1998) proposed four criteria for evaluating narrative research, which formed the foundation for our list: width (i.e., comprehensiveness of the interview), coherence (i.e., constructing a meaningful picture of participants’ storied lives and experiences), insightfulness (i.e., originality in the story presented), and parsimony (i.e., a coherent analysis based on a smaller number of concepts that has aesthetic appeal for readers). Alongside these criteria, three additional items were added to the list (see Tracy, 2010): reflexivity (i.e., the ability of the researcher to recognize her integral role in the research being carried out, including subjective values, biases, and motivations), rich rigour (i.e., the sample, methods and data are sufficient, appropriate and complex), and significant contribution of the work.
With these criteria in mind, several strategies and techniques were used to ensure the quality of the research. First, participants were allowed to reflect on their interview transcripts and our analytical interpretations (i.e., the resulting narrative types) to encourage continued interpretation and collaboration – not for the purpose of validating or converging upon some singular or objective truth (Tracy, 2010). Second, as a physically active, able-bodied individual working with a group of current and former athletes with physical disabilities, the primary researcher engaged in reflexive journaling throughout the research process (Zitomer & Goodwin, 2014). In doing so, she was able to explore and critically reflect on prior assumptions or biases (e.g., related to disability, sport, and participation) and ongoing interpretations of the data. Third and finally, the second author acted as a “critical friend”, acting as a “theoretical sounding board” throughout the interpretation and analysis of data (Sparkes & Smith, 2014, p. 182).

Responsibility falls on both the research team and the readers of this research to ensure and evaluate its quality, respectively. While we have taken steps to effectively communicate the research process, our assumptions, and the criteria that we feel provides the best standard of judgement, it is up to the reader to evaluate this research the context of the information that we have provided (Sparkes & Smith, 2009; Zitomer & Goodwin, 2014).
References


Smith, B., & Sparkes, A. C. (2012). Narrative analysis in sport and physical culture. In K. Young & M. Atkinson (Eds.), *Qualitative research on sport and physical culture* (pp. 81-101). Bingley, UK: Emerald Press.


Appendix F
Manuscript 3 Recruitment E-mails, Scripts, and Forms
RECRUITMENT SCRIPT

**Title of Study:** Exploring the Factors that Shape Athletes’ Experiences in Para sport

Recruiting for this project will mostly occur through regional, provincial, and national para sport organizations using readily available contact information (e.g., phone number or e-mail). The process is outlined below.

1. Acquire permission from para sport organizations to recruit coaches. Contact information for para sport organizations will be retrieved through publically available sources (e.g., web pages). Organizations will be asked to nominate coaches that meet the inclusion criteria for this study, or circulate an e-mail to members of the organization requesting nominations for coaches.

2. Nominated coaches will be reviewed by the research team to ensure they meet the criteria for inclusion in this study. For coaches that meet the inclusion criteria, an e-mail inviting the coach to participate in the study will be sent (a) directly to the coach (provided that contact information is publically available) or (b) to the organization or club with which the coach is affiliated, with a request to forward the e-mail to the specified coach.

The coaches’ recruitment process will be in accordance with the organizational leaders’ desires (e.g., sending information about the study to selected coaches via e-mail). For recruitment of all participants via phone or in person, the following script will be followed:

1. Introduction of researcher’s name and affiliation with Queen’s University
2. Introduction of the title and main objective of the project
3. Ask if the person(s) is/are interested in hearing more about the project
   a. If answer is “No”, say “Thank you, have a nice day”
4. Explain the project as outlined in the Letter of Information
   a. Ethics approval
   b. Purpose (explore coaches’ role in shaping the quality of athletes’ experiences)
   c. Inclusion criteria
      i. 18 years of age or older
      ii. Coach athletes with physical disabilities
      iii. Head coach of current team for at least one year
      iv. Recognized ability to foster positive experiences/outcomes for athletes via nomination procedure
   d. Data collection procedure (mobile sessions and follow-up interview)
   e. Time commitment
5. Ask if coach would like to participate
   a. If answer is “No”, say, “Thank you, have a nice day”
   b. If answer is “Yes”, move into consent form
   c. If participant is unsure, offer to leave them the Letter of Information and ask if it would be okay to contact them in 3 to 5 days
Once coaches have agreed to participate, an initial meeting date will be determined to introduce the project to athletes and other involved individuals (e.g., assistant coaches) at a team practice or meeting. The research team will provide an overview of the study and field any questions or concerns. The script will be as follows:

1. Introduction of researcher’s name and affiliation with Queen’s University
2. Introduction of the title and main objective of the project
3. Explain the project as outlined in the Letter of Information
   a. Ethics approval
   b. Purpose (explore coaches’ role in shaping the quality of athletes’ experiences)
   c. Inclusion criteria
      i. 18 years of age or older
      ii. Coach athletes with physical disabilities
      iii. Head coach of current team for at least one year
      iv. Recognized ability to foster positive experiences/outcomes for athletes via nomination procedure
   d. Data collection procedure (mobile sessions and follow-up interview)
   e. Time commitment

Athletes will then be provided with the letter of information and consent form. Although the study will primarily focus on the head coach, audio-recordings during mobile sessions will pick-up interactions between coaches and athletes. This data will inform our analysis of how coaches may influence athletes’ experiences in parasport. Signed consent forms will be collected by the researcher at the end of the meeting (any individuals who do not provide consent will be excluded from the data collection process, and any data inadvertently collected will be immediately destroyed). At the convenience of the head coach and his/her team, a date will be scheduled to begin data collection.
RECRUITMENT E-MAILS: REQUEST FOR NOMINATIONS

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Para-sport

Hello,

My name is Veronica Allan and I am a PhD Candidate in the School of Kinesiology and Health Studies at Queen’s University. I have obtained your contact information from your organization’s website. I would like to ask for assistance from your organization. As a part of my dissertation research, I will be investigating the role that parasport coaches play in shaping the quality of athletes’ experiences in parasport. To this end, I am seeking nominations from your organization for parasport coaches who have a recognized ability to foster quality experiences and/or positive outcomes for their athletes (e.g., opportunities for challenge, independence, inclusion, etc.). Nominated individuals must be 18 years of age or older, coach athletes with physical disabilities, and have a minimum of one year experience working as the head coach of their current team. As a parasport organization, I would greatly appreciate your help in the recruitment process. This includes: (a) completing the attached nomination form and returning it to me, and/or (b) circulating the following e-mail and nomination form to members of your organization.

Nominated coaches who agree to participate will be provided with financial compensation for their time. We anticipate this study will help us to better understand the coaching strategies that lead to quality sport experiences for athletes with physical disabilities. When the study has concluded, I will provide you and your organization with a written summary of the overall results and conclusions of this investigation for your own use and benefit (if requested).

While we cannot guarantee or promise that you will receive any direct benefits from this study, the results of the study will have important implications for the training and education of parasport coaches, as well as improving the experiences of athletes in parasport. To reach these goals, however, we need your help. If you have any questions about this study or would like to submit a nomination, please contact lead researcher Veronica Allan by phone at 613-449-4958 or e-mail at 7vra@queensu.ca.

Warm Regards,

Veronica Allan, PhD
Candidate
Primary Investigator
School of Kinesiology & Health Studies
Queen’s University
Kingston, ON
613-533-6000 ext. 78207
7vra@queensu.ca

Jean Côté, PhD
Professor and Director
School of Kinesiology & Health Studies
Queen’s University
Kingston, ON
613-533-6000 ext. 79049
jc46@queensu.ca

Amy Latimer-Cheung, PhD
Associate Professor
School of Kinesiology & Health Studies
Queen’s University
Kingston, ON
613-533-6000 ext. 78773
amy.latimer@queensu.ca
Hello,

My name is Veronica Allan and I am a PhD Candidate in the School of Kinesiology and Health Studies at Queen’s University. I have obtained your contact information from [name of contact (e.g., athletic director)] at [name of organization] As a part of my dissertation research, I will be investigating the role that parasport coaches play in shaping the quality of athletes’ experiences in parasport. To this end, I am seeking nominations from members of your organization (e.g., coaches, athletes, administrators, officials) in order to identify parasport coaches that you consider to be successful or effective with respect to facilitating positive athlete experiences and outcomes. Please complete the attached nomination form and return this form to me if you or anyone you know might be a good fit for this study. Your nominations are greatly appreciated.

I am looking for...

- Coaches of athletes with physical disabilities who meet the following criteria:
  - 18 years of age or older
  - Minimum of one year experience as head coach of current team
  - A recognized ability to foster quality experiences and/or positive outcomes for athletes (e.g., opportunities for challenge, independence, inclusion, etc.)

This study will include...

- Four ‘mobile’ sessions (i.e., the coach will be shadowed by the researcher during four training and/or competition sessions): 60-90 minutes per session (4-6 hours total).
- One follow-up interview (i.e., the coach will be asked about his/her thoughts and behaviours with respect to facilitating quality experiences for athletes): 45-60 minutes.

Participating coaches will be provided with financial compensation for their time. We anticipate this study will help us to better understand the coaching strategies that lead to quality sport experiences for athletes with physical disabilities. For your assistance in the recruitment process, I will provide you with a written summary of the overall results and conclusions of this investigation for your own use and benefit.

While we cannot guarantee or promise that you will receive any direct benefits from this study, the results of the study will have important implications for the training and education of parasport coaches, as well as improving the experiences of athletes in parasport. To reach these goals, however, we need your help. If you have any questions about this study or would like to submit a nomination, please contact lead researcher Veronica Allan by phone at 613-449-4958 or e-mail at 7vra@queensu.ca.

Warm regards,
Veronica Allan, PhD
Candidate
Primary Investigator
School of Kinesiology & Health Studies
Queen’s University
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613-533-6000 ext. 78207 7vra@queensu.ca

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Professor and Director
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613-533-6000 ext. 79049 jc46@queensu.ca

Amy Latimer-Cheung, PhD
Associate Professor
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Kingston, ON
613-533-6000 ext. 78773 amy.latimer@queensu.ca
SOCIAL MEDIA MESSAGES: REQUEST FOR NOMINATIONS

**Title of Study:** Exploring the Factors that Shape Athletes’ Experiences in Paraspport

**Webpage (http://www.queensu.ca/sportpsych/)**

Do you know a paraspport coach who has had a significant impact on the experiences of his/her athletes? Researchers in the School of Kinesiology and Health Studies at Queen’s University are investigating the role that paraspport coaches play in shaping the quality of athletes’ experiences in paraspport. To do this, they are seeking nominations for paraspport coaches that you consider to be successful or effective with respect to facilitating positive athlete experiences and outcomes (e.g., opportunities for challenge, independence, inclusion, etc.). Nominated individuals must be 18 years of age or older, coach athletes with physical disabilities, and have a minimum of one year experience working as the head coach of their current team. If you or anyone you know might be a good fit for this study, please download and complete the nomination form [insert download link]. Nomination forms can be submitted to lead researcher Veronica Allan at 7vra@queensu.ca. For more information, please contact Veronica at the above e-mail address or 613-533-6000 ext. 78207.

Selected coaches will be contacted directly to request their participation. Coaches who agree to take part in this study will be provided with financial compensation for their time. This study will involve four ‘mobile’ sessions (i.e., coaches will be shadowed or observed in training and competition settings) and one follow-up interview, during which coaches will be asked about their thoughts and behaviours with respect to facilitating quality experiences for athletes. For your assistance in the recruitment process, you will be provided with a written summary of the overall results and conclusions of this investigation for your own use and benefit.

**Facebook**

Do you know a paraspport coach who has had a significant impact on the experiences of his/her athletes? Researchers in the School of Kinesiology and Health Studies at Queen’s University are investigating the role that paraspport coaches play in shaping the quality of athletes’ experiences in paraspport. To do this, they are seeking nominations for paraspport coaches that you consider to be successful or effective with respect to facilitating positive athlete experiences and outcomes. For more information or to nominate a coach, please visit: http://www.queensu.ca/sportpsych/

**Twitter**

@queensu researchers are seeking nominations for paraspport coaches who have had a significant impact on their athletes. Check out: http://www.queensu.ca/sportpsych/
RECRUITMENT E-MAILS: REQUEST FOR PARTICIPATION

**Title of Study:** Exploring the Factors that Shape Athletes’ Experiences in Parasport

Hello,

My name is Veronica Allan and I am a PhD Candidate in the School of Kinesiology and Health Studies at Queen’s University. I have obtained your contact information from [name of contact (e.g., athletic director) at [name of organization]. As a part of my dissertation research, I will be investigating the role that parasport coaches play in shaping the quality of athletes’ experiences in parasport. Having been identified as an exemplary model of a successful or effective coach when it comes to facilitating positive athlete experiences and outcomes, you have been nominated by members of your organization for participation in this study. We would appreciate your help in expanding researchers’ understanding of coaching strategies that lead to quality sport experiences for athletes with physical disabilities.

If you are 18 years of age or older, coach athletes with physical disabilities, and have a minimum of one year experience working as the head coach of your current team, then you are eligible to participate. This study will include participation in four ‘mobile’ sessions (i.e., you will be shadowed or observed in training and competition settings; a time commitment of 60-90 minutes per session, or 4-6 hours in total) and one follow-up interview, during which you will be asked about your thoughts and behaviours with respect to facilitating quality experiences for athletes (a time commitment of 45-60 minutes). To thank you for your participation, you will be provided with financial compensation for your time and a written summary of the overall results and conclusions of this investigation for your own use and benefit.

While we cannot guarantee or promise that you will receive any direct benefits from this study, the results of the study will have important implications for the training and education of parasport coaches, as well as improving the experiences of athletes in parasport. To reach these goals, however, we need your help. If you are interested in participating or have any questions about this study, please contact lead researcher Veronica Allan by phone at 613-449-4958 or e-mail at 7vra@queensu.ca. Alternatively, if you would like to nominate another coach for participation in this study, please complete and return the attached nomination form.

Warm regards,
COACH NOMINATION FORM

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in ParaSport

Researchers in the School of Kinesiology and Health Studies at Queen’s University are currently seeking nominations for paraSport coaches that you consider to be successful or effective with respect to facilitating positive athlete experiences and outcomes. These nominations will inform the recruitment process for a study investigating the role that paraSport coaches play in shaping the quality of athletes’ experiences in paraSport. If you or anyone you know meets the criteria listed below, tell us why you think this person is a successful or effective coach!

Eligibility Criteria:
- 18 years of age or older
- Coach athletes with physical disabilities
- At least one year of experience as head coach of current team
- Recognized ability to foster positive athlete experiences and outcomes

Name of nominated coach: ___________________________

Affiliation of nominated coach (e.g., organization or club): ______________________________

In the box below, tell us why this person is a successful or effective paraSport coach:

When answering this question, think about:
- What does this person do to create positive sport experiences for his/her athletes?
- How have athletes benefited from working with this coach?
- Has this person received any awards or accolades for their role in sport?

What is your relation to the nominated coach (e.g., athlete, official)?
__________________________________________

How long have you known the nominated coach? __________________________

May we contact you again regarding this nomination? YES NO

If yes, please provide your name and preferred method of contact (e.g., e-mail address or phone number) in the space provided:
__________________________________________

Submit your completed form to Veronica Allan at 7vra@queensu.ca

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EVALUATION FORM FOR NOMINATED COACHES

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Parasport

Note: The information used to complete this form will be retrieved from the coach nomination form and other publically available forums (e.g., webpage for affiliated club or organization, news articles).

Name of nominated coach: __________________________

Affiliation of nominated coach (e.g., organization or club): ______________________________

Current sport coached: ______________________________

Section A: Basic Inclusion Criteria
Does the coach meet the basic criteria for inclusion? (Check yes/no/unknown)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
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</thead>
<tbody>
<tr>
<td>18 years of age or older</td>
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<tr>
<td>Coach of athletes with physical disabilities</td>
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<tr>
<td>At least one year of experience as head coach of current team</td>
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<tr>
<td>Ability to foster positive athlete experiences and/or outcomes*</td>
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Section B: Rationale for Nomination
In the response to “tell us why this person is a successful or effective disability sport coach,” list key aspects of nomination related to:

☐ The coach’s role in facilitating positive experiences for his/her athletes

☐ The coach’s role in producing positive athlete outcomes

On the following scale, rate the strength of this nomination with respect to the coach’s perceived ability to facilitate positive athlete outcomes and experiences:

1 2 3 4 5 6 7
Weak Strong
Section C: Past Experience
Record all known information pertaining to the nominated coach’s previous experience as an athlete or coach.

<table>
<thead>
<tr>
<th>Previous Experience…</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
<th>If yes, list the following…</th>
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<td></td>
<td>Sport(s)</td>
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<tr>
<td>As an athlete?</td>
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<td>As a coach of able-bodied athletes?</td>
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<tr>
<td>As a coach of athletes with disabilities?</td>
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Section D: Performance Records
For each team or individual athlete coached, record all known information concerning performance during each season or year of competition. Information pertaining to individual athletes can be limited to performance at the provincial level or beyond.

<table>
<thead>
<tr>
<th>Sport</th>
<th>Name of Athlete or Team</th>
<th>Season or Year</th>
<th>Win-Loss Record</th>
<th>Ranking</th>
<th>Qualifiers or Championships</th>
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Section E: Awards and Accomplishments
List all awards, accomplishments or titles relevant to the coach’s role in sport, including a brief description (e.g., criteria or scope; degree of recognition – regional, provincial, national, etc.).

<table>
<thead>
<tr>
<th>Award or Accomplishment</th>
<th>Description</th>
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RECOMMEND FOR INCLUSION? (Circle one)  YES  NO

Researcher Initials:
Appendix G

Manuscript 3 Letters of Information and Consent Forms
Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Parasport

You are being asked to participate in a research study conducted by Veronica Allan, a doctoral student working under the supervision of Dr. Amy Latimer-Cheung and Dr. Jean Côté in the School of Kinesiology and Health Studies at Queen’s University. Results obtained from this research study will contribute to the completion of a doctoral degree.

What is this study about?
The purpose of this study is to examine the role that parasport coaches play in shaping the quality of athletes’ experiences in parasport.

What does participation in this study involve?
As a participant, you will be asked to take part in four mobile interview sessions lasting approximately 60-90 minutes each (4-6 hours total). During each session, the lead researcher, Veronica Allan, will shadow you in training and competition settings (i.e., the lead researcher will follow and observe you as you complete your coaching duties). Data collected will include field notes from the researcher’s observations as well as audio-recordings of your interactions with both the researcher and your athletes. Once all of the mobile sessions have been completed, you will be asked to take part in a follow-up interview with Veronica Allan at a time and location of your choosing, lasting approximately 45-60 minutes. During this interview, you will be asked about your perceptions of what constitutes a quality experience in sport and how you facilitate these experiences for your athletes. This interview will be audio-recorded. In order to fully understand your role in shaping the quality of athletes’ experiences in parasport, the lead researcher will also invite each of your athletes to take part in a 30-minute semi-structured interview. These interviews will explore athletes’ perceptions of what constitutes a quality experience in parasport and how you, the coach, facilitate those experiences for the interviewed athletes.

Is my participation voluntary?
Participation in this study is voluntary. If you agree to participate, you may withdraw for any reason for up to 6 months following the completion of data collection without any consequences by contacting the lead researcher, Veronica Allan at 613-533-6000 ext. 78207 or 7vra@queensu.ca. You may also refuse to answer any questions without penalty. Any information collected up to the time you withdraw from the study will be destroyed.

What are the risks of participating?
There are minor risks associated with participation in this study, as you will be asked personal questions about your role as a coach and you will be asked to reflect on your coaching experiences. Although there are minor risks, we will do everything possible to minimize these risks. You are not required to answer any questions that you are uncomfortable with and you will be referred to a local clinic or phone line through the
Canadian Mental Health Association (http://www.cmha.ca/get-involved/find-your-cmha/) if any of these questions trigger emotional distress.

**What are the benefits of participating?**
As a participant, you may be making important contributions to the research literature. We anticipate that this study will help researchers to better understand coach behaviours and strategies that lead to quality sport experiences for athletes with physical disabilities. We cannot guarantee that you will receive any direct benefits from the study.

**What will happen to the information that I provide?**
The data from this study will be published and presented at conferences; however, your identity will be kept confidential to the greatest extent possible. With regards to the questionnaire data, the information you provide us will be de-identified and given a code so that no one will be able to identify you from the information unless they have the participant code key. Direct quotations from the interviews will be used during the presentation of results, but each participant will be given a pseudonym to conceal his or her identity. The only individuals with access to identifying information will include Veronica Allan, Amy Latimer-Cheung, and Jean Côté. Members of the research team will have access to the de-identified questionnaire data and interview transcripts – all of whom are required to complete a confidentiality agreement. All the information provided through the questionnaires, interviews, and consent forms will be kept confidential and stored in a controlled-access location (e.g., locked office, password protected files) in the School of Kinesiology and Health Studies at Queen’s University for a minimum of five years after the completion of the study as per University requirements.

**Will I be compensated for participating?**
You will be provided with financial compensation ($10/hour) for taking part in this study. If you have any questions or wish to receive any additional information regarding this research, please contact lead researcher Veronica Allan or co-supervisors Amy Latimer-Cheung and Jean Côté (see below). Any ethical concerns regarding this study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6000 ext. 74025 (1-844-535-2988 toll free in North America).

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PARTICIPANT CONSENT FORM – COACH

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Para

Name (please print clearly): _________________________________

1. I have read the Letter of Information and have had any questions answered to my satisfaction.

2. I understand that I will be participating in the study called ‘Exploring the Factors that Shape Athletes’ Experiences in Para’, and that I will be asked to (a) complete a brief (5-10 minutes) demographic questionnaire, (b) take part in four mobile interview sessions lasting approximately 60-90 minutes each (4-6 hours total), and (c) participate in a 45-60 minute follow-up interview. Additionally, I am aware that athletes under my supervision during the mobile interview sessions may be invited to participate in a 30-minute interview that will explore their perceptions of my role as the coach.

3. I understand that my participation in this study is voluntary and I may withdraw at any time. I understand that every effort will be made to maintain the confidentiality of the data now and in the future. Only team members and supervisor(s) in this research project will have access to the data. The data will be kept in a locked office. Electronic files of questionnaire data, audio-recordings and interview transcripts will be password protected. The data may also be published in professional journals or presented at scientific conferences, but any such presentations will never breach individual confidentiality. All data containing personal identifiable information will be destroyed after five years. Should I be interested, I am entitled to a copy of the findings, which will be emailed to me.

4. I am aware that if I have any questions about study participation, they may be directed to Veronica Allan (lead researcher) at 7vra@queensu.ca or 613-533-6000 ext. 78207, Amy Latimer-Cheung (co-supervisor) at amy.latimer@queensu.ca or 613-533-6000 ext. 78773, or Jean Côté (co-supervisor) at jc46@queensu.ca or 613-533-6000 ext. 79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 1-844-535-2988.

I have read the above statements and freely consent to participate in this research:

Signature: _______________________________ Date: _______________________________

I agree that I can be audio-recorded: YES NO

I would like to receive a summary of the study’s results: YES NO

If YES, please send a summary to me at this email address: _______________________________
Title of Study: Exploring the Factors that Shape Athletes’ Experiences in ParaSport

You are being asked to participate in a research study conducted by Veronica Allan, a doctoral student working under the supervision of Dr. Amy Latimer-Cheung and Dr. Jean Côté in the School of Kinesiology and Health Studies at Queen’s University. Results obtained from this research study will contribute to the completion of a doctoral degree.

What is this study about?
The purpose of this study is to examine the role that parasport coaches play in shaping the quality of athletes’ experiences in parasport.

What does participation in this study involve?
As the athlete of a participating coach, you will be present during four mobile interview sessions lasting approximately 60-90 minutes each (4-6 hours total). During each session, the lead researcher, Veronica Allan, will shadow your coach in training and competition settings (i.e., the lead researcher will follow and observe your coach as he or she completes coaching duties). Data collected will include field notes from the researcher’s observations as well as audio-recordings of your coach’s interactions with both the researcher and participating athletes.

Is my participation voluntary?
Participation in this study is voluntary. If you wish to participate, you may withdraw for any reason for up to 6 months following the completion of data collection without any consequences by contacting the lead researcher, Veronica Allan at 613-533-6000 ext. 78207 or 7vra@queensu.ca. Any information collected up to the time you withdraw from the study will be destroyed. If you do not wish to participate, and other athletes with the same coach wish to participate, you may see the researcher making notes and audio-recordings. However, we assure you that none of those notes and recordings will include you if you do not consent to this project. If any notes or recordings inadvertently include you and you did not consent to this project, they will be immediately destroyed.

What are the risks of participating?
There are no known risks for athletes taking part in this study.

What are the benefits of participating?
As a participant, you may be making important contributions to the research literature. We anticipate that this study will help researchers to better understand coach behaviours and strategies that lead to quality sport experiences for athletes with physical disabilities. We cannot guarantee that you will receive any direct benefits from the study.

What will happen to the information that I provide?
The data from this study will be published and presented at conferences; however, your identity will be kept confidential to the greatest extent possible. The only individuals with access to identifying information will include Veronica Allan, Amy Latimer-Cheung, and
Jean Côté. All the information provided through the mobile interviews and consent forms will be kept confidential and stored in a controlled-access location (e.g., locked office, password protected files) in the School of Kinesiology and Health Studies at Queen’s University for a minimum of five years after the completion of the study as per University requirements.

If you have any questions or wish to receive any additional information regarding this research, please contact lead researcher Veronica Allan or co-supervisors Amy Latimer-Cheung and Jean Côté (see below). Any ethical concerns regarding this study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6000 ext. 74025 (1-844-535-2988 toll free in North America).

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PARTICIPANT CONSENT FORM – ATHLETE

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Parasport

Name (please print clearly): _________________________________

1. I have read the Letter of Information and have had any questions answered to my satisfaction.

2. I understand that I will be participating in the study called ‘Exploring the Factors that Shape Athletes’ Experiences in Parasport’, and that I may be present during four mobile interview sessions (60-90 minutes each) during which the lead researcher will shadow my coach (i.e., follow and observe the coach as he or she completes coaching duties). I also understand that my interactions with the coach will be observed and audio-recorded if I am present during these sessions.

3. I understand that my participation in this study is voluntary and I may withdraw at any time.
   I understand that every effort will be made to maintain the confidentiality of the data now and in the future. Only team members and supervisor(s) in this research project will have access to the data. The data will be kept in a locked office. Electronic files of audio-recordings and transcripts will be password protected. The data may also be published in professional journals or presented at scientific conferences, but any such presentations will never breach individual confidentiality. All data containing personal identifiable information will be destroyed after five years. Should I be interested, I am entitled to a copy of the findings, which will be emailed to me.

4. I am aware that if I have any questions about study participation, they may be directed to Veronica Allan (lead researcher) at 7vra@queensu.ca or 613-533-6000 ext. 78207, Amy Latimer-Cheung (co-supervisor) at amy.latimer@queensu.ca or 613-533-6000 ext. 78773, or Jean Côté (co-supervisor) at jc46@queensu.ca or 613-533-6000 ext. 79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 1-844-535-2988.

I have read the above statements and freely consent to participate in this research:

Signature: _______________________________ Date: __________________________

I agree that I can be audio-recorded: YES NO

I would like to receive a summary of the study’s results: YES NO

If YES, please send a summary to me at this email address: ______________________
PARENT/GUARDIAN LETTER OF INFORMATION

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Parasport

Your child is being asked to participate in a research study conducted by Veronica Allan, a doctoral student working under the supervision of Dr. Amy Latimer-Cheung and Dr. Jean Côté in the School of Kinesiology and Health Studies at Queen’s University. Results obtained from this research study will contribute to the completion of a doctoral degree.

What is this study about?
The purpose of this study is to examine the role that parasport coaches play in shaping the quality of athletes’ experiences in parasport.

What does participation in this study involve?
As the athlete of a participating coach, your child will be present during four mobile interview sessions lasting approximately 60-90 minutes each (4-6 hours total). During each session, the lead researcher, Veronica Allan, will shadow your child’s coach in training and competition settings (i.e., the lead researcher will follow and observe your child’s coach as he or she completes coaching duties). Data collected will include field notes from the researcher’s observations as well as audio-recordings of the coach’s interactions with both the researcher and participating athletes.

Is my participation voluntary?
Participation in this study is voluntary. Your child may withdraw for any reason for up to 6 months following the completion of data collection without any consequences by contacting the lead researcher, Veronica Allan at 613-533-6000 ext. 78207 or 7vra@queensu.ca. Any information collected up to the time you withdraw from the study will be destroyed. If you do not wish your child to participate, and other athletes with the same coach wish to participate, you may see the researcher making notes and audio-recordings. However, we assure you that none of those notes and recordings will include your child if you do not consent to your child’s participation in this project. If any notes or recordings inadvertently include your child and you did not consent to this project, they will be immediately destroyed.

What are the risks of participating?
There are no known risks for athletes taking part in this study.

What are the benefits of participating?
As a participant, your child may be making important contributions to the research literature. We anticipate that this study will help researchers to better understand coach behaviours and strategies that lead to quality sport experiences for athletes with physical disabilities. We cannot guarantee that you or your child will receive any direct benefits from the study.

What will happen to the information that I provide?
The data from this study will be published and presented at conferences; however, your child’s identity will be kept confidential to the greatest extent possible. The only individuals with access to identifying information will include Veronica Allan, Amy Latimer-Cheung, and Jean Côté. All the information provided through the mobile interviews and consent forms will be kept confidential and stored in a controlled-access location (e.g., locked office, password protected files) in the School of Kinesiology and Health Studies at Queen’s University for a minimum of five years after the completion of the study as per University requirements.

If you have any questions or wish to receive any additional information regarding this research, please contact lead researcher Veronica Allan or co-supervisors Amy Latimer-Cheung and Jean Côté (see below). Any ethical concerns regarding this study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6000 ext. 74025 (1-844-535-2988 toll free in North America).

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PARTICIPANT CONSENT FORM – PARENT/GUARDIAN

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Parasport

Name (please print clearly): _________________________________

1. I have read the Letter of Information and have had any questions answered to my satisfaction.

2. I understand that my child will be participating in the study called ‘Exploring the Factors that Shape Athletes’ Experiences in Parasport’, and that my child may be present during four mobile interview sessions (60-90 minutes each; 4-6 hours total) during which the lead researcher will shadow my child’s coach (i.e., follow and observe the coach as he or she completes coaching duties). I also understand that my child’s interactions with the coach will be observed and audio-recorded if my child is present during these sessions.

3. I understand that my child’s participation in this study is voluntary and that my child may withdraw at any time. I understand that every effort will be made to maintain the confidentiality of the data now and in the future. Only team members and supervisor(s) in this research project will have access to the data. The data will be kept in a locked office. Electronic files of audio-recordings and transcripts will be password protected. The data may also be published in professional journals or presented at scientific conferences, but any such presentations will never breach individual confidentiality. All data containing personal identifiable information will be destroyed after five years. Should I be interested, I am entitled to a copy of the findings, which will be emailed to me.

4. I am aware that if I have any questions about study participation, they may be directed to Veronica Allan (lead researcher) at 7vra@queensu.ca or 613-533-6000 ext. 78207, Amy Latimer-Cheung (co-supervisor) at amy.latimer@queensu.ca or 613-533-6000 ext. 78773, or Jean Côté (co-supervisor) at jc46@queensu.ca or 613-533-6000 ext. 79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 1-844-535-2988.

I, ___________________ give permission to allow ___________________ to participate in the study titled ‘Exploring the Factors that Shape Athletes’ Experiences in Parasport’ conducted by the School of Kinesiology and Health Studies at Queen’s University.

Signature: __________________________ Date: __________________________

I agree that my child can be audio-recorded: YES NO

I would like to receive a summary of the study’s results: YES NO

If YES, please send a summary to me at this email address: __________________________
ATHLETE LETTER OF INFORMATION - INTERVIEW

**Title of Study:** Exploring the Factors that Shape Athletes’ Experiences in Para-sport

You are being asked to participate in a research study conducted by Veronica Allan, a doctoral student working under the supervision of Dr. Amy Latimer-Cheung and Dr. Jean Côté in the School of Kinesiology and Health Studies at Queen’s University. Results obtained from this research study will contribute to the completion of a doctoral degree.

**What is this study about?**
The purpose of this study is to examine the role that para-sport coaches play in shaping the quality of athletes’ experiences in para-sport.

**What does participation in this study involve?**
You will be asked to take part in a semi-structured interview with the lead researcher, Veronica Allan. This interview will take place at the preferred time and location of your choosing, and will last approximately 30 minutes. During this interview, you will be asked about your perceptions of what constitutes a quality experience in para-sport and how your coach facilitates these experiences. This interview will be audio-recorded.

**Is my participation voluntary?**
Participation in this study is voluntary. If you agree to participate, you may withdraw for any reason for up to 6 months following the completion of data collection without any consequences by contacting the lead researcher, Veronica Allan at 613-533-6000 ext. 78207 or 7vra@queensu.ca. You may also refuse to answer any questions without penalty. Any information collected up to the time you withdraw from the study will be destroyed.

**What are the risks of participating?**
There are minor risks associated with participation in this study, as you will be asked personal questions about your experiences in para-sport. Although there are minor risks, we will do everything possible to minimize these risks. You are not required to answer any questions that you are uncomfortable with and you will be referred to a local clinic or phone line through the Canadian Mental Health Association (http://www.cmha.ca/get-involved/find-your-cmha/) if any of these questions trigger emotional distress.

**What are the benefits of participating?**
As a participant, you may be making important contributions to the research literature. We anticipate that this study will help researchers to better understand coach behaviours and strategies that lead to quality sport experiences for athletes with physical disabilities. We cannot guarantee that you will receive any direct benefits from the study.

**What will happen to the information that I provide?**
The data from this study will be published and presented at conferences; however, your identity will be kept confidential to the greatest extent possible. Direct quotations from the interviews will be used during the presentation of results, but each participant will be
given a pseudonym to conceal his or her identity. The only individuals with access to identifying information will include Veronica Allan, Amy Latimer-Cheung, and Jean Côté. Members of the research team will have access to the de-identified interview transcripts – all of whom are required to complete a confidentiality agreement. All the information provided through the interviews and consent forms will be kept confidential and stored in a controlled-access location (e.g., locked office, password protected files) in the School of Kinesiology and Health Studies at Queen’s University for a minimum of five years after the completion of the study as per University requirements. If you have any questions or wish to receive any additional information regarding this research, please contact lead researcher Veronica Allan or co-supervisors Amy Latimer-Cheung and Jean Côté (see below). Any ethical concerns regarding this study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6000 ext. 74025 (1-844-535-2988 toll free in North America).

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amy.latimer@queensu.ca
PARTICIPANT CONSENT FORM – ATHLETE (Interview)

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Parasport

Name (please print clearly): ________________________________

1. I have read the Letter of Information and have had any questions answered to my satisfaction.

2. I understand that I will be participating in the study called ‘Exploring the Factors that Shape Athletes’ Experiences in Parasport’ and that I will be asked to participate in a semi-structured interview lasting approximately 30 minutes.

3. I understand that my participation in this study is voluntary and I may withdraw at any time.
   I understand that every effort will be made to maintain the confidentiality of the data now and in the future. Only team members and supervisor(s) in this research project will have access to the data. The data will be kept in a locked office. Electronic files of audio-recordings and transcripts will be password protected. The data may also be published in professional journals or presented at scientific conferences, but any such presentations will never breach individual confidentiality. All data containing personal identifiable information will be destroyed after five years. Should I be interested, I am entitled to a copy of the findings, which will be emailed to me.

4. I am aware that if I have any questions about study participation, they may be directed to Veronica Allan (lead researcher) at 7vra@queensu.ca or 613-533-6000 ext. 78207, Amy Latimer-Cheung (co-supervisor) at amy.latimer@queensu.ca or 613-533-6000 ext. 78773, or Jean Côté (co-supervisor) at jc46@queensu.ca or 613-533-6000 ext. 79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 1-844-535-2988.

I have read the above statements and freely consent to participate in this research:

Signature: ________________________________ Date: ________________________________

I agree that I can be audio-recorded: YES NO

I would like to receive a summary of the study’s results: YES NO

If YES, please send a summary to me at this email address: ________________________________
Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Parasport

Your child is being asked to participate in a research study conducted by Veronica Allan, a doctoral student working under the supervision of Dr. Amy Latimer-Cheung and Dr. Jean Côté in the School of Kinesiology and Health Studies at Queen’s University. Results obtained from this research study will contribute to the completion of a doctoral degree.

What is this study about?
The purpose of this study is to examine the role that parasport coaches play in shaping the quality of athletes’ experiences in parasport.

What does participation in this study involve?
Your child will be asked to take part in a semi-structured interview with the lead researcher, Veronica Allan. This interview will take place at the preferred time and location of your child’s choosing, and will last approximately 30 minutes. During this interview, your child will be asked about his or her perceptions of what constitutes a quality experience in parasport and how your child’s coach facilitates these experiences. This interview will be audio-recorded.

Is my participation voluntary?
Participation in this study is voluntary. Your child may withdraw for any reason for up to 6 months following the completion of data collection without any consequences by contacting the lead researcher, Veronica Allan at 613-533-6000 ext. 78207 or 7vra@queensu.ca. Any information collected up to the time you withdraw from the study will be destroyed.

What are the risks of participating?
There are minor risks associated with participation in this study, as your child will be asked personal questions about his or her experiences in parasport. Although there are minor risks, we will do everything possible to minimize these risks. Your child is not required to answer any questions that he or she is uncomfortable with and he or she will be referred to a local clinic or phone line through the Canadian Mental Health Association (http://www.cmha.ca/get-involved/find-your-cmha/) if any of these questions trigger emotional distress.

What are the benefits of participating?
As a participant, your child may be making important contributions to the research literature. We anticipate that this study will help researchers to better understand coach behaviours and strategies that lead to quality sport experiences for athletes with physical disabilities. We cannot guarantee that you or your child will receive any direct benefits from the study.

What will happen to the information that I provide?
The data from this study will be published and presented at conferences; however, your child’s identity will be kept confidential to the greatest extent possible. Direct quotations from the interviews will be used during the presentation of results, but each participant will be given a pseudonym to conceal his or her identity. The only individuals with access to identifying information will include Veronica Allan, Amy Latimer-Cheung, and Jean Côté. Members of the research team will have access to the de-identified interview transcripts – all of whom are required to complete a confidentiality agreement. All the information provided through the interviews and consent forms will be kept confidential and stored in a controlled-access location (e.g., locked office, password protected files) in the School of Kinesiology and Health Studies at Queen’s University for a minimum of five years after the completion of the study as per University requirements.

If you have any questions or wish to receive any additional information regarding this research, please contact lead researcher Veronica Allan or co-supervisors Amy Latimer-Cheung and Jean Côté (see below). Any ethical concerns regarding this study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6000 ext. 74025 (1-844-535-2988 toll free in North America).

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amy.latimer@queensu.ca
PARTICIPANT CONSENT FORM – PARENT/GUARDIAN (Interview)

Title of Study: Exploring the Factors that Shape Athletes’ Experiences in Parasport

Name (please print clearly): _________________________________

1. I have read the Letter of Information and have had any questions answered to my satisfaction.

2. I understand that my child will be participating in the study called ‘Exploring the Factors that Shape Athletes’ Experiences in Parasport’, and that my child will be asked to participate in a semi-structured interview lasting approximately 30 minutes.

3. I understand that my child’s participation in this study is voluntary and that my child may withdraw at any time. I understand that every effort will be made to maintain the confidentiality of the data now and in the future. Only team members and supervisor(s) in this research project will have access to the data. The data will be kept in a locked office. Electronic files of audio-recordings and transcripts will be password protected. The data may also be published in professional journals or presented at scientific conferences, but any such presentations will never breach individual confidentiality. All data containing personal identifiable information will be destroyed after five years. Should I be interested, I am entitled to a copy of the findings, which will be emailed to me.

4. I am aware that if I have any questions about study participation, they may be directed to Veronica Allan (lead researcher) at 7vra@queensu.ca or 613-533-6000 ext. 78207, Amy Latimer-Cheung (co-supervisor) at amy.latimer@queensu.ca or 613-533-6000 ext. 78773, or Jean Côté (co-supervisor) at jc46@queensu.ca or 613-533-6000 ext. 79049. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 1-844-535-2988.

I, _____________________ give permission to allow _______________ to participate in the study titled ‘Exploring the Factors that Shape Athletes’ Experiences in Parasport’ conducted by the School of Kinesiology and Health Studies at Queen’s University.

Signature: ___________________________ Date: ___________________________

I agree that my child can be audio-recorded: YES NO

I would like to receive a summary of the study’s results: YES NO

If YES, please send a summary to me at this email address: _________________________
Appendix H

Manuscript 3 Demographic Questionnaire and Interview Guides
DEMOGRAPHIC QUESTIONNAIRE

General Questions

1. Gender: ________________ OR Do not wish to specify: ______

2. Age: ___________________ OR Do not wish to specify: ______

3. Ethnicity (circle one):

White  Black  Asian  Latino  Aboriginal  Other: ________________

Do not wish to specify

4. Highest Level of Education: ____________ OR Do not wish to specify: ______

5. Do you have a physical disability? Circle one: Yes  No  Do not wish to specify

   a. If yes, there a few standard questions about the nature of your physical
disability, specifically the type of disability. You can skip any questions
that you do not feel comfortable responding to.

      i. Type: ____________________________

      ii. Cause: ____________________________

      iii. Area(s) of body affected: ____________________________

Sport-related Questions

1. Total years of experience as a coach: ______________

   a. Years of experience coaching able-bodied athletes: ______________

   b. Years of experience coaching athletes with disabilities: ______________

2. Type of sport you are currently coaching: ______________

   a. Age range of athletes: ______________

   b. Competitive level of team: ______________

   c. Years of experience working with this team: ______________

3. List all coaching certifications or qualifications (e.g., NCCP):

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
MOBILE INTERVIEWS: PROTOCOL, SCRIPTS, AND SAMPLE QUESTIONS

The mobile interview protocol combines participant observation with unstructured interviewing, allowing the researcher to examine the participant’s thought processes and behaviours in real time. Also described as a “walk-along” interview, the researcher will shadow the coach as he/she moves through the sport environment. For this study, the researcher will engage in four separate mobile interview sessions. These sessions will be conducted primarily during team practices, and will include at least one competition. Each mobile interview will begin when the coach arrives at the practice or competition venue to fulfill team-related responsibilities, and conclude when these responsibilities have been completed and the coach leaves. The researcher will only enter public spaces in the sport environment (at the participant’s discretion), and will not collect data in private or sensitive locations (e.g., locker rooms). A detailed overview of the mobile interview protocol, including scripts and sample questions, has been provided below.

Section A: Protocol

1. The researcher and the participant will meet in a pre-determined location (e.g., at the entrance to the training or competition venue) approximately fifteen minutes before the coach’s regular practice or competition duties begin.
   a. Sessions 1-4: Pre-session script
   b. Sessions 2-4: Fit with lapel microphone (if permitted)

2. At the discretion of the participant, the researcher will shadow the participant throughout the practice or competition. Shadowing will only take place in public spaces, and will not include private or sensitive locations (e.g., locker rooms).
   a. Sessions 1: Passive observation and note-taking
   b. Sessions 2-4: Passive observation, note-taking, and unstructured interviewing (with audio-recording, if permitted)

3. The mobile interview session will be concluded when the practice or competition ends and the participant has been relieved of his or her duties.
   a. Sessions 1-4: Post-session script
   b. Sessions 2-4: Remove and download audio from lapel microphone (if used)

Section B: Scripts

Session 1: Training (Pilot)

Pre-session script: The last time we met, we went over the Letter of Information and you provided written consent to participate in this study. Thank you for taking the time to complete the demographic questionnaire and meet with me today in order to get started on your first mobile interview session. Today, I will simply be shadowing you as you move through your regular practice duties and responsibilities. During this time, I will be passively observing and taking notes regarding your coaching style and interactions with
athletes. The purpose of today’s session is to allow you and your athletes to become more familiar with my presence, while I learn a little bit about how your team works. If at any time you feel uncomfortable or would prefer that I did not observe or take notes, please let me know and I will stop. You have the right to withdraw from this study at any time. In future sessions (but not today), I will ask for your permission to audio-record these mobile interviews. Do you have any questions for me before we get started?

**Post-session script:** Thank you for your time today. Do you have any feedback for me or is there anything you would like to discuss now that the session is over? If you are interested in continuing on with this study, would you like to schedule our next session now or should I follow-up with you in the next couple of days?

**Session 2: Training**

**Pre-session script:** In our first session, I passively observed and took notes while you were running a practice for your athletes. Today, if you are comfortable with it, I would like to take a more active role in the session. In other words, I may ask you questions throughout the practice to try and better understand some of your thoughts, decisions, and actions as you coach and interact with your athletes. I will never intentionally interrupt the you or the practice – please inform me if I do. With your permission, I would like to audio-record this session in order to preserve (a) my conversations with you and (b) your interactions with the athletes. If you agree, then I will fit you with a lapel microphone before we begin. Please let me know if at any time you feel uncomfortable or would prefer that I did not audio-record, observe or take notes. Do you have any questions for me before we get started?

**Post-session script:** Thank you for your time today. [Turn off and remove lapel microphone]. Do you have any feedback for me or is there anything you would like to discuss now that the session is over? Would you like to schedule our next session now or should I follow-up with you in the next couple of days?

**Subsequent Sessions: Training and/or Competition**

**Script:** As with our previous sessions, I will shadow you during today’s practice/competition. I may also ask questions to try and better understand some of your thoughts, decisions, and actions as your coach and interact with your athletes. I will never intentionally interrupt the you or the practice/competition – please inform me if I do. Do I have your permission to audio-record this session? [If yes, set up lapel microphone]. Again, please let me know if at any time you feel uncomfortable or would prefer that I did not audio-record, observe or take notes. Do you have any questions for me before we get started?

**Post-session script:** Thank you for your time today. [Turn off and remove lapel microphone]. Do you have any feedback for me or is there anything you would like to discuss now that the session is over? Would you like to schedule our next session now or should I follow-up with you in the next couple of days?
Section C: Sample Questions (Sessions 2-4)

Pre-session

- Tell me about the goals or objectives you have for today’s session.
  - For individual athletes? For the team? For yourself?
- How did you prepare for today’s session?
  - How did your preparation today compare to the way you would prepare for a session on a typical day?
- What steps did you take, if any, to optimize your athletes’ experience?
  - E.g., to enhance athletes’ learning, enjoyment, feeling of inclusion…

During session

Due to the informal, conversational style of this interview, questions will emerge from the immediate context (i.e., in response to coach behaviour). Specifically, questions will target the antecedents of coach behaviours and the intended outcomes of such behaviours. “Behaviour” refers to verbal statements, decisions, actions or interactions with others. For the purposes of this study, behaviours that appear to influence athletes’ experiences or outcomes will be targeted.

- Tell me about [behaviour].
  - Why did you engage in [behaviour]?
  - Can you describe your thoughts or decisions leading up to [behaviour]?
- Was [behaviour] prompted by anything?
  - For example, something you saw or heard?
- How were you feeling at the time you engaged in [behaviour]?
  - How do you feel now?
- What was the intended impact or outcome of [behaviour]?
  - How do you think your athletes perceived [behaviour]?
  - What influence do you feel that [behaviour] may have on your athletes?
- Was [behaviour] linked to any past training or education you’ve received?

Post-session

- Describe how you feel today’s session went.
- Were the goals or objectives you set out for today’s session achieved?
  - Why or why not?
- Tell me about how you perceived the experiences of your athletes as they participated.
  - What do you think your athletes got out of today’s session?
- What will you do (if anything) to debrief or reflect on today’s session?

Notes: Session = practice or competition; sub-bullets indicate potential probes.

FOLLOW-UP INTERVIEWS: SEMI-STRUCTURED INTERVIEW GUIDE
Coach

Introductory script: To begin, I would just like to thank you for allowing me to observe and ask questions during the past few training and competition sessions with your team. The purpose of today’s interview is simply to follow up on everything I’ve learned about you and your team over these past few sessions. Specifically, I am aiming to understand what you consider to be a ‘quality sport experience’ for your athletes. Furthermore, I would like to learn about the strategies that you use to foster these quality sport experiences for your athletes. Do I have your permission to audio-record this interview? Do you have any questions for me before we begin? Great. Let’s get started.

Opening Questions:

1. Tell me about your decision or motivation to pursue a career as a coach.
   a. Describe the path you took to get to where you are today in your coaching career.

2. How would you describe your coaching philosophy?

‘What’ Questions:

3. In your opinion, what defines an ideal or optimal experience in sport?
   a. Describe the aspects of participation in a training session that make the experience feel full, valued, and meaningful for the athletes.
   b. Describe the aspects of participation in a game or competition that make the experience feel full, valued, and meaningful for the athletes.

4. Imagine your athletes are engaged in what you would consider to be an ideal training session. From a coach’s perspective, what does this training session look like?
   a. What can you see? What can you hear?
   b. How do the athletes look? How do you think the athletes feel?
   c. As the coach, how do you feel?

5. Imagine your athletes are engaged in what you would consider to be an ideal game or competition. From a coach’s perspective, what does this game or competition look like?
   a. What can you see? What can you hear?
   b. How do the athletes look? How do you think the athletes feel?
   c. As the coach, how do you feel?

6. When your athletes are optimally engaged in sport, what do you think the athletes “get out” of the experience?
   a. In the short term? In the long term?
   b. Physically? Psychologically? Socially?
‘How’ Questions:

7. How would you describe the coach’s role in shaping the sport experiences of athletes?
   a. Thinking about what you consider to be an ideal or quality sport experience, what do you do to facilitate these experiences for your athletes?

8. Describe any strategies or techniques that you employ in your coaching practice to help facilitate quality sport experiences for your athletes.
   a. While planning for a training session or competition?
   b. During a training session or competition?
   c. Immediately following a training session or competition?
   d. Outside of the sport context?

9. How do you know how your athletes are responding to a particular training session or competition?
   a. Do you monitor your athletes in any way? If so, how? (Examples: observation, asking questions, reviewing training logs)
   b. Describe an example of a time when things were not going well in a training session or competition, and what you did to turn things around.

Follow-up Questions:

10. Over the course of the sessions I observed, I noticed that you had a tendency to engage in the following types of behaviours: [list examples from mobile interview sessions].
    a. Considering everything we have discussed about what constitutes a quality sport experience and the strategies you employ to facilitate these experiences, please comment on each of these behaviours.
       i. What was the purpose or goal of this behaviour?
       ii. How do you think this behaviour influenced athletes’ experiences?

Closing Questions:

11. Do you have any previous training or experience that has contributed toward your understanding of what constitutes a quality experience for parasport athletes?
    a. Please describe.

12. Do you have any previous training or experience that has influenced your ability to facilitate quality experiences for your athletes?
    b. Please describe.

13. Is there anything you feel that I have missed, or anything else you would like to comment upon?
Closing script: Thank you for your time today. Once all of the data has been compiled and analyzed, you will be provided with an opportunity to comment on the results. Feel free to contact me at any point if you have any questions or concerns.
FOLLOW-UP INTERVIEWS: SEMI-STRUCTURED INTERVIEW GUIDE

Athlete

Introductory script: The purpose of today’s interview is to follow up on everything I’ve learned about your coach and your team over the past few sessions I’ve observed. Specifically, I am aiming to understand what you consider to be a ‘quality sport experience’ and the strategies or behaviours your coach uses to facilitate these experiences for you. Do I have your permission to audio-record this interview? Do you have any questions for me before we begin? Great. Let’s get started.

Opening Questions:

1. Tell me about yourself.
   a. How old are you?
   b. Where did you grow up?
   c. What is your current occupation? (e.g., student, athlete, other profession)
   d. Describe any other hobbies or activities that occupy your time.

2. If it’s alright with you, would you mind telling me about your disability?
   a. Type? Cause? Area(s) of body affected?

3. Tell me about your motivation or reasons for getting involved in parasport.
   a. How did you get started in parasport? How old were you?
   b. Describe the path you took to get to where you are now in your parasport career.
   c. Have your motivations or reasons for participating in parasport changed from when you first got involved with parasport until now?

4. How did you get involved with your current parasport team?
   a. How long have you been on this team?
   b. How long have you been working with the current head coach?
   c. How often do you train? How often do you compete?
   d. Describe your current level of competition.

5. Tell me about your goals for participating in parasport.

Main Questions:

14. In your opinion, what defines an ideal or optimal experience in parasport?
   a. When you are participating in a practice or training session, what is it about your participation that makes the experience feel positive or satisfying?
   b. When you are participating in a game or competition, what is it about your participation that makes the experience feel positive or satisfying?
c. Overall, how would you describe the most meaningful or valued aspects of your participation in parasport?

15. Describe the relationship between you and your current coach.
   a. Provide an example of a time when the coach did something for you that resulted in a positive or satisfying parasport experience.
      i. Describe the context or situation.
      ii. What did the coach say or do?
      iii. How did you feel?
   b. Alternatively, can you describe a time when the coach did something that resulted in a negative parasport experience?
      i. Describe the context or situation.
      ii. What did the coach say or do?
      iii. How did you feel?
   c. Do you feel that the coach plays an important role in your parasport participation?
      i. Why or why not?

16. How would you describe the role of your coach in shaping the quality of your experiences in parasport?
   a. Thinking about what you consider to be an ideal or quality parasport experience:
      i. What does the coach say or do to facilitate these experiences?
      ii. How does the coach make you feel?
   b. Thinking about what you consider to be a negative parasport experience:
      i. What does the coach say or do to facilitate these experiences?
      ii. How does the coach make you feel?
   c. Are there any differences in the way the coach behaves in training versus competition that influences the quality of your experience?

Follow-up Questions:

1. Over the course of the sessions I observed, I noticed that your coach would often engage in the following types of behaviours: [list examples from mobile interview sessions].
   a. For each behaviour:
      i. How does this behaviour make you feel?
      ii. What impact does this behaviour have on your parasport participation?

Closing Questions:

1. What stands out to you the most about your coach?

2. Is there anything you feel that I have missed, or anything else you would like to comment upon?
Closing script: Thank you for your time today. Once all of the data has been compiled and analyzed, you will be provided with an opportunity to comment on the results. Feel free to contact me at any point if you have any questions or concerns.
Appendix I
Manuscript 4 Description of Data Sources
Data Sources: Brief Summary of Objectives, Methods, and Key Findings

The objective of the knowledge inquiry stage was to identify relevant sources of first-generation knowledge. This involved the completion of three primary studies (led by the first author), as well as a systematic search and review of the literature (see Grant & Booth, 2009). In total, three sources of data, encompassing 26 primary studies, were included: (a) athlete interviews \(n = 2\); Allan, Smith, Côté, Martin Ginis, & Latimer-Cheung, 2018; Allan, Evans, Latimer-Cheung, & Côté, submitted), (b) coach observation and interviews \(n = 1\); Allan, Martin Ginis, Latimer-Cheung, & Côté, in preparation), and (c) articles identified through a systematic search and review of the literature \(n = 23\). A brief description of the objectives, methods, and key findings of these data sources are provided below.

**Athlete interviews.** Life history interviews were conducted with 21 current and former athletes with physical disabilities in Canada. Participants represented a wide range of ages, disability types, sport types, and competitive levels. The purpose of these interviews was two-fold: (a) to explore the meanings that athletes attribute to their participation in disability sport over time (Allan et al., 2018), and (b) to examine athletes’ perceptions of effective coaching over the course of their development in disability sport (Allan et al., submitted). The results of these studies provided valuable insight into what athletes perceived to constitute quality experiences in disability sport, and how coaches facilitated quality experiences for these athletes, respectively.

**Coach observation and interviews.** A collective case study was performed to investigate the role that coaches play in shaping quality programs for athletes with disabilities (Allan et al., in preparation). Model disability sport coaches were identified
through a nomination and evaluation procedure, representing varied sport types and competitive contexts. Over the course of three or four training sessions, the lead researcher shadowed each coach while observing, taking notes, and asking questions. Subsequently, head coaches \((n = 6)\), an assistant coach \((n = 1)\), and a sample of athletes \((n = 17)\) took part in semi-structured interviews to triangulate perceptions of quality disability sport programming, and the coach’s role in fostering it. The results of this study provide evidence to support the link between coaching behaviors and athletes’ quality experiences in disability sport, and enhance our understanding of how coaches shape quality disability sport programs. Furthermore, immersion in the coaching context provided the lead researcher with the hypothetical tools and experience to produce an authentic, realistic, and feasible account of positive coach-athlete interactions in disability sport.

**Systematic search and review of the literature.** The systematic search and review method allowed for a critical analysis and summary of findings from multiple forms of research (Grant & Booth, 2009). Correspondingly, a systematic search of databases including ERIC, PsycINFO, and SPORTDiscus using the keywords Disability OR Disabled (Group 1) AND Sport OR Disability sport (Group 2) AND Coach OR Instructor (Group 3) was performed in April 2017. The titles and abstracts of journal articles published in English between 1980 and 2017 were reviewed and evaluated for inclusion. The inclusion criteria were kept broad, encompassing quantitative and qualitative studies that described or analyzed any of the following in disability sport contexts: (a) characteristics, knowledge, attitudes, behaviours, and/or development of coaches; (b) coach-athlete interactions and/or relationships; or (c) influence of coaching
on athletes’ experiences and/or outcomes. A manual search of the reference lists of key articles identified through the systematic search was also performed. In total, 23 articles were selected and reviewed. Articles represented a range of qualitative methodologies, including semi-structured interviews, focus groups, observation, case studies, and reflexive conversations, in addition to quantitative studies using questionnaires. Participants included athletes and coaches of athletes with physical, sensory, and intellectual disabilities.
References


Appendix J
Manuscript 4 Summary of Articles Included in Knowledge Synthesis
Table 8. *Summary of findings from knowledge synthesis: Article information and initial codes*

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<tr>
<th>Citation</th>
<th>Study Design</th>
<th>Sample</th>
<th>Determinants of Coach Behaviours</th>
<th>Coach Behaviours</th>
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<tbody>
<tr>
<td>Allan, Evans, Latimer-Cheung, &amp; Côté (submitted)</td>
<td>Semi-structured life history interviews</td>
<td>Current and former Canadian athletes with a physical disability ($n = 21$)</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Allan, Martin Ginis, Latimer-Cheung, &amp; Côté (in preparation)</td>
<td>Case studies using observations and semi-structured interviews</td>
<td>Canadian disability sport coaches ($n = 7$) and athletes with physical, visual, and intellectual disabilities ($n = 17$)</td>
<td>Attitudes (towards inclusion) Disability-specific knowledge Experience as an athlete Experience as a coach Experience with disability Sport-specific knowledge</td>
<td>Adapting for unique abilities (F) Advocating for athletes (F) Believing in athletes (F) Creating opportunities for peer mentorship (F) Empathizing with athletes (F) Engaging in frequent communication with athlete (F) Facilitating goal-setting (F) Facilitating holistic development (F) Focusing on ability (F) Including athletes in demonstrations (F) Including everyone (F) Listening to athletes (F) Making a personal connection (F) Modelling skills or activities (F) Providing clear instruction (F) Providing encouragement (F) Providing reassurance (F) Reflecting on behaviour (F) Rewarding good performance (F) Setting appropriate expectations (F)</td>
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<tr>
<td>Allan, Smith, Côté, Martin Ginis, &amp; Latimer-Cheung (2018)</td>
<td>Semi-structured life history interviews</td>
<td>Current and former Canadian athletes with a physical disability ( n = 21 )</td>
<td>Attitudes (towards inclusion) Disablity-specific knowledge Experience as an athlete Experience as a coach Experience with disability Sport-specific knowledge</td>
<td>Supporting autonomy (F) Treating athletes with respect and dignity (F) Working collaboratively with athletes (F) Being organized (F) Believing in athletes (F) Criticizing athletes (D) Empathizing with athletes (F) Facilitating holistic development (F) Failing to empathize with athletes (D) Failing to support or advocate for athletes (D) Favours athletes who are more abled (D) Including everyone (F) Making a personal connection (F) Providing clear instruction (F) Reflecting on behaviour (F) Singling out athletes in front of others (D) Treating athletes with indifference or neglect (D) Working collaboratively with athletes (F)</td>
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<tr>
<td>Banack, Sabiston, &amp; Bloom (2011)</td>
<td>Cross-sectional using questionnaires</td>
<td>Canadian Paralympic athletes with a physical or visual disability ( n = 113 )</td>
<td>N/A</td>
<td>Supporting autonomy (F)</td>
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<tr>
<td>Bantjes, Swartz, Conchar, &amp; Derman (2015)</td>
<td>Semi-structured interviews</td>
<td>South African adolescents with Disability-specific knowledge Sport-specific knowledge</td>
<td>Adapting for unique abilities (F) Being autocratic (D) Empathizing with athletes (F)</td>
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<tr>
<td>Beyer, Flores, &amp; Vargas-Tonsing (2008)</td>
<td>Cross-sectional using questionnaires</td>
<td>American volunteer coaches with and without experience working with youth who have ADHD (n = 221)</td>
<td>Attitudes (towards inclusion) Experience with disability</td>
<td>Making assumptions (D)</td>
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<tr>
<td>Bush &amp; Silk (2012)</td>
<td>Reflexive conversation</td>
<td>Successful coach of elite athletes with a disability in the UK (n = 1)</td>
<td>Experience as an athlete Experience as a coach Experience with disability</td>
<td>Advocating for athletes (F) Including everyone (F) Focusing on ability (F) Providing reassurance (F) Working collaboratively with athletes (F)</td>
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<td>Cheon, Reeve, Lee, &amp; Lee (2015)</td>
<td>Intervention with pre-test and post-test using questionnaires</td>
<td>Korean Paralympic coaches (n = 33) and athletes with a physical or visual disability (n = 64)</td>
<td>N/A</td>
<td>Supporting autonomy (F)</td>
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<td>Cregan, Bloom, &amp; Reid (2007)</td>
<td>Semi-structured interviews</td>
<td>Paralympic coaches of swimmers with a physical disability (n = 6)</td>
<td>Disability-specific knowledge Experience as an athlete Experience as a coach</td>
<td>Adapting for unique abilities (F) Assessing situational needs/individual differences (F) Believing in athletes (F) Facilitating goal-setting (F)</td>
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<tr>
<td>DePauw &amp; Gavron (1991)</td>
<td>Cross-sectional using questionnaires</td>
<td>American coaches of athletes with a disability (n = 239)</td>
<td>Experience as an athlete Experience as a coach</td>
<td>N/A</td>
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<tr>
<td>Douglas, Smith, Vidic, &amp; Stran (2016)</td>
<td>Case studies using observations, interviews, and documents</td>
<td>Successful American male collegiate basketball coach (n = 1) and wheelchair basketball coach (n = 1)</td>
<td>Experience as an athlete Experience as a coach</td>
<td>Assessing situational needs/individual differences (F) Facilitating holistic development (F) Making a personal connection (F) Modelling principles and values (F) Problem-solving (F)</td>
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<tr>
<td>Duarte &amp; Culver (2014)</td>
<td>Case study using timeline, interviews, and documents</td>
<td>Experienced Canadian developmental adaptive sailing coach (n = 1)</td>
<td>Experience as a coach Experience with disability</td>
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<td>Falcao, Bloom, &amp; Loughead (2015)</td>
<td>Semi-structured interviews</td>
<td>Canadian Paralympic coaches (n = 7)</td>
<td>Experience as an athlete Experience as a coach Experience with disability</td>
<td>Assessing situational needs/individual differences (F) Engaging in frequent communication (F) Facilitating goal-setting (F)</td>
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| Hammond, Young, & Konjarski (2014) | Cross-sectional using questionnaires      | Experienced and inexperienced Australian coaches of swimmers with intellectual disabilities ($n = 52$) | Attitudes (towards inclusion) \(\text{Experience with disability} \) Perceived confidence in ability to coach athletes with a disability | Facilitating opportunities for team-building (F)  
Focusing on ability (F)  
Making a personal connection (F)  
N/A |
| Hatemleh, Al-Ruz, & Hindawi (2009) | Cross-sectional using questionnaires      | Jordanian national team athletes with a physical disability ($n = 63$) | Sport-specific knowledge | Being autocratic (D)  
Rewarding good performance (F)  
Supporting autonomy (F) |
| Hutzler & Bergman (2011)      | Focus groups                              | Retired Israeli national team athletes with a physical disability ($n = 9$) | Attitudes (towards inclusion) \(\text{Disability-specific knowledge} \) Sport-specific knowledge | Failing to ensuring a safe activity/environment (D)  
Failing to support or advocate for athletes (D)  
Treating athletes with indifference or neglect (D) |
<p>| Kozub &amp; Poretta (1998)        | Cross-sectional using questionnaires      | American high school coaches ($n = 295$) | Attitudes (towards inclusion) (\text{Experience with disability} ) | Focusing only on performance (D) |</p>
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<td>Martin &amp; Mushett (1996)</td>
<td>Cross-sectional using questionnaires</td>
<td>Competitive swimmers with a physical or visual disability in Canada, Great Britain, or the United States ($n = 78$)</td>
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<td>Listening to athletes (F)</td>
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<td>McMaster, Culver, &amp; Werthner (2012)</td>
<td>Semi-structured interviews and observations</td>
<td>Canadian coaches of athletes with a physical disability ($n = 5$)</td>
<td>Disability-specific knowledge, Experience as an athlete, Experience as a coach, Experience with disability, Perceived confidence in ability to coach athletes with a disability, Sport-specific knowledge</td>
<td>Engaging in frequent communication (F), Making a personal connection (F), Working collaboratively with athletes (F)</td>
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<td>Robbins, Houston, &amp; Dummer (2010)</td>
<td>Semi-structured interviews</td>
<td>American basketball ($n = 8$) and wheelchair basketball coaches ($n = 6$)</td>
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<td>Shirazipour et al. (2017)</td>
<td>Semi-structured life history interviews</td>
<td>Physically active military veterans with a physical disability in Canada, the United Kingdom, or the United States ($n = 18$)</td>
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<td>Shirazipour, Aiken, &amp; Latimer-Cheung (2017)</td>
<td>Longitudinal with questionnaires</td>
<td>Military veterans with a physical disability participating in a physical activity event in Canada, the United Kingdom, or the United States ($n = 49$)</td>
<td>N/A</td>
<td>Demonstrating interpersonal skills (F)</td>
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<td>Tawse, Bloom, Sabiston, &amp; Reid (2012)</td>
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<td>Experienced Canadian wheelchair rugby coaches ($n = 4$)</td>
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<td>Facilitating holistic development (F)</td>
</tr>
<tr>
<td>Citation</td>
<td>Study Design</td>
<td>Sample</td>
<td>Determinants of Coach Behaviours</td>
<td>Coach Behaviours</td>
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<tr>
<td>Turnnidge, Vierimaa, &amp; Côté (2012)</td>
<td>Semi-structured interviews</td>
<td>Canadian youth swimmers with a physical disability ($n=8$)</td>
<td>N/A</td>
<td>Focusing on ability (F)</td>
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<td>Problem-solving (F)</td>
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<td>Setting appropriate expectations (F)</td>
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<td>Supporting autonomy (F)</td>
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<tr>
<td>Vargas, Flores, &amp; Beyer (2015)</td>
<td>Cross-sectional using questionnaires</td>
<td>American volunteer coaches with and without experience working with youth who have ADHD ($n=55$)</td>
<td>Disability-specific knowledge</td>
<td>Believing in athletes (F)</td>
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<td>Facilitating goal-setting (F)</td>
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<td>Facilitating holistic development (F)</td>
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<td>Making a personal connection (F)</td>
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<td>Providing encouragement (F)</td>
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<td>Supporting autonomy (F)</td>
</tr>
<tr>
<td>Wynnyk &amp; Spencer-Cavaliere (2013)</td>
<td>Semi-structured interviews, observations, photographs, and documents</td>
<td>Canadian youth sledge hockey players with physical, intellectual, or developmental disabilities ($n=10$)</td>
<td>Sport-specific knowledge</td>
<td>Believing in athletes (F)</td>
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<td>Criticizing athletes (D)</td>
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<td>Providing encouragement (F)</td>
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<td>Singling out athletes in front of others (D)</td>
</tr>
</tbody>
</table>

*Note.* F refers to facilitative coach behaviours (i.e., linked to positive athlete experiences or outcomes) and D refers to debilitative coach behaviours (i.e., linked to negative athlete experiences or outcomes).
References for Articles Included in Knowledge Synthesis


Appendix K

Manuscript 4 Instructions for Reviewers
**Round 1 – Instructions for Reviewers:**

A creative nonfiction is story that is grounded in research findings and composed using the techniques of fiction (i.e., an evidence-based story). The purpose of this creative nonfiction is to tell a realistic and relatable story that parasport coaches can use to learn interpersonal coach behaviours that are likely to generate positive outcomes for athletes. Furthermore, this creative nonfiction will serve to promote positive perceptions of parasport athletes. What follows is an outline for this creative nonfiction, which has been set in the context of para-swimming.

While you review this outline, please consider the following questions:

1. What do you think of the story?
2. How might this story be received by coaches and/or coach developers in the context of coach training and education?
   a. Do you think it will be effective?
3. Is the story authentic (e.g., relevant, accurate, truthful, credible)? Consider:
   a. Story plot and content
   b. Setting and context
   c. Characters and dialogue
4. What would you consider to be an ideal length/format for this story? Consider:
   a. Text
   b. Audio
   c. Video
5. Are there any changes you would make to improve this story?

Please return your feedback to me by using track changes (i.e., to edit or provide comments embedded in the outline) or by recording your comments and suggestions in a separate document – whichever you prefer.

**Suggested deadline: February 2nd, 2018**
Round 2 – Instructions for Reviewers:

A creative nonfiction is story that is grounded in research findings and composed using the techniques of fiction (i.e., an evidence-based story). The purpose of this creative nonfiction is to tell a realistic and relatable story that parasport coaches can use to learn interpersonal coach behaviours that are likely to generate positive outcomes for athletes. Furthermore, this creative nonfiction will serve to promote positive perceptions of parasport athletes. What follows is a complete draft of this creative nonfiction, which has been set in the context of para-swimming. Feedback from past reviews by athletes, coaches, administrators, and researchers was used to inform the current draft of the creative nonfiction.

While you review this outline, please consider the following questions:

1. What do you think of the story?
2. How might this story be received by coaches and/or coach developers as a tool for coach learning in the context of a workshop designed to teach interpersonal behaviours to coaches?
   a. Do you think it will be effective?
3. Is the story authentic (e.g., relevant, accurate, truthful, credible)? Consider:
   a. Story plot and content
   b. Setting and context
   c. Characters and dialogue
4. What do you think about the level of language?
   a. Is it realistic? Is it too polished or sophisticated?
5. What do you think about the length of this story?
   a. Do you have any suggestions for places to add or cut?
6. What would you consider to be an ideal/format for this story? Consider:
   a. Text
   b. Audio
   c. Video
7. Are there any changes you would make to improve this story?

Please return your feedback to me by using track changes (i.e., to edit or provide comments embedded in the document) or by recording your comments and suggestions in a separate document or e-mail – whichever you prefer.

Suggested deadline: May 30th, 2018