

University of Ottawa

Gender Equity in Disability Sport: A Rapid Scoping Review of Literature

Prepared for the Gender Equity in Sport Research Hub at the University of
Toronto

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10-30-2020

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Research on Gender Equity in Disability Sport - Executive Summary

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This literature review on disability sport was conducted for the Gender+ Equity in Sport in Canada Research Hub to serve as a foundational report for strategic research priorities development.

The review took place from May to October, 2020.

Databases Searched	Search Terms
<ul style="list-style-type: none">• Medline• Embase• SPORTDiscus• Physical Education Index• PsycINFO• Web of Science	<ul style="list-style-type: none">• Broad search terms included gender + disability + sport, and their related synonyms and terms. Full search terms and strategies are available Appendix A
Grey Literature Search Methods	
<ul style="list-style-type: none">• Grey literature identified through reference lists of selected academic literature	

An initial yield of **n=1542 records** was accrued. At the first phase of screening, titles and abstracts of records were reviewed. **Inclusion criteria** were: (a) involves gender-focused components, (b) concerns any gender identities, (c) in the social sciences field, (d) concerns people's involvement, participation, or engagement in sport, (e) adopts a disability lens. Exclusion criteria were: (a) no gender focus, (b) no disability lens, (c) no sport focus, (d) fictional depictions in the media, (e) primarily concerned with physiological/performance-related outcomes, (f) conference abstracts or proceedings. This **first stage yielded 272 records**. In the second stage, full-texts were retrieved and reviewed using the same inclusion/exclusion criteria as the first phase with the additions of excluding any non-retrievable full-text copies and any duplicate records. This resulted in 128 records selected for extraction. After applying a limit of the **years 2000-2020**, data were extracted from the records in categories of information about location/countries, contexts, participants, sport, theories, methodologies, and results. These data were reviewed for the extent to which their contents were **relevant to constructing understandings of gender equity in disability sport**. **As a result, the final selected records were narrowed down to 45 records**. Descriptive statistics helped to understand the frequencies and percentages of the data across the categories, and qualitative descriptive analyses were used to group data inductively into themes that can help address the research question. Grey literature was additionally explored after this process and will be included in a supplement to this review.

Key Findings

- Ableist and masculinity notions are intertwined into disability sport, and shape the experiences of disabled athletes (female and male)
- Disabled athletes are often challenged with how to construct their identities, in integrating masculinity, femininity, and battling being seen as an ungendered athlete, while also battling the notion that their gender should matter before their identity as athletes first.
- Media perpetuates the notions of masculinity and ability in their representations of female disabled athletes
- Beyond masculinity and ability, there also exists the influence of cultural and religious norms – which may be important to explore in Canadian multicultural contexts

Top Research Gaps

- There is little research to draw on in understanding gender equity in disability sport that is situated in Canada.
- Low attention on recreational and school contexts, and/or children and youth.
- There is a gap in understanding participation rates in disability sport by gender across levels of involvement (e.g., organizational, coaching, athletic, etc.) and across context (e.g., elite, Paralympic, recreational, school, etc.), from a Canadian (and even International) perspective.
- ~75% of research in disability sport and gender does not employ any theory or conceptual framing.
- ~45% of research in disability sport and gender does not explicitly address epistemological positioning and/or methodological approaches.
- All the records returned in this review involved either men (male) or women (female) identities, with no records concerning any other identified gender identities.
- Much of the research is situated in elite and Paralympic contexts, with less focus on recreational, school, and developmental contexts for disability sport.

Application: Priority Questions or Next Steps

- Call for more research in gender equity in the Canadian disability context.
- Explore recreational and schools as places of opportunity to promote gender participation.
- Call for more collaborative action research approaches to tackle research questions most relevant to disabled people and supporting their empowerment.
- Explore leveraging technology for promoting gender equity in this context.
- Explore the use of reverse integration contexts to promote inclusion.

Abstract

This literature review is a foundational document for the E-Alliance Gender+ Equity in Sport in Canada Research Hub. Lead by Dr. Diane Culver [and Shaikh, M., Alexander, D., Sjluka, V., Duarte, T., Wrona, D., Parrott, L., Fournier, K.], the research team searched six databases (Medline, Embase, SPORTDiscus, Physical Education Index, PsycINFO, Web of Science) for research related to understanding gender equity in disability sport. From an initial yield of 1542 records, two phases of screening were undertaken, resulting in 128 records selected for extraction. Data were extracted from the records in categories related to context, sample, methodologies, and results information; data were additionally reviewed and further narrowed to 45 records ready for synthesis. Descriptive statistics were generated from these data categories, and qualitative descriptive analyses were used to group data inductively into themes that can help address the research question. Key findings included: (a) ableist and masculinity notions are intertwined into disability sport, and shape the experiences of disabled athletes, (b) disabled athletes are often challenged with how to construct their identities, and (c) contemporary media perpetuates the notions of masculinity and ability in their representations of female disabled athletes. In terms of gaps: (a) limited research in understanding gender equity in disability sport in Canada, and (b) limited data participation rates in disability sport by gender across levels of involvement (e.g., organizational, coaching, athletic, etc.) and across context (e.g., elite, Paralympic, recreational, school, etc.). Based on the results from our review, future gender+ equity in sport in Canada research should focus on: (a) more research in gender equity in the Canadian disability context, (b) exploring recreational and schools as places of opportunity to promote gender participation, and (c) collaborative action research approaches to tackle research questions most relevant to disabled people and supporting their empowerment.

Introduction

The purpose of this review was to synthesize existing literature on gender equity in disability sport. To do so, the authors used a rapid scoping review methodology to broadly search for literature that discusses gender and its interaction with disability sport, at all levels of people involved in sport (e.g., policy makers, managers, coaches, athletes). The authors opted to take a broad scope here, as research specific to understanding the phenomenon of *gender equity* in disability sport is quite limited. Given the limited research on this specific topic within Canada, the scope of this review is International. The implications of this review will be to (a) understand what literature currently exists that can offer insight into gender equity in disability sport, (b) identify the gaps in this research area and, (c) inform recommendations to progress research in this area.

In this review, disability sport refers to sport played in contexts mostly or entirely exclusive to disabled people (with some exceptions). These contexts can span across recreational to elite levels, para- and Paralympic competition contexts, local to national level contexts, and Special Olympics contexts. Gender also took a wide definition to be inclusive of multiple gender identities.

Gender and disability, as independent categories, each have an influence on the experiences of sport participants. The intersection of these two categories, results in a unique array of experiences and outcomes. The experiences and discourses around sport pre-dominantly favour the regularity of ableism, masculinity, and heteronormativity. These influences tend to be uniquely constructed in disability sport and cut across multiple levels of sport organization policies, sport structures, coaches' practices, and athletes' experiences.

In terms of gender and sport, women tend to be underrepresented in Canadian sport, especially in leadership roles (Demers et al., 2019), and can experience more prejudice and discrimination than men. At the same time, women may also accrue positive developmental experiences in sport, and find sport to be an empowering experience (Ashton-Shaeffer et al., 2001). People with a disability are also marginalized in sport, with a lack of opportunities to participate and compete, and to be coached (Duarte et al., 2020).

Disabled women have often experienced the “double whammy” of being marginalized by both their gender and disability (Deegan, 2018; Henderson & Bedini, 1997). However, beyond just individual influences of these norms is their intersecting impact on the athlete experience, as well as the influence of ableist and masculine demands of the context and participating others. Combining these several intersecting influences offers a unique experience of the gendered disabled athlete. The findings of this review highlight the effects of this reality through a socio-ecological lens. Further data is presented about the intersection of gender and disability related to culture, media, participation rates, and research in recreational contexts.

Review Methods

A rapid scoping review methodology was undertaken to explore what literature is out there that can help strengthen our understandings of gender equity in disability sport. Arksey & O'Malley's (2005) five-step framework was followed which included: (a) identifying the research question, (b) identifying relevant records, (c) records selection, (d) charting the data, and (e) collating, summarizing and reporting the results. Although these stages are described in the order they were carried out, across these stages an iterative approach was taken to make sure that an appropriate list of articles was selected for data extraction and synthesis.

A. Identifying the research question

Given our expertise in disability sport, as well as initial searches using Google and Google Scholar, we determined that the literature on gender equity in disability sport in Canada was severely limited. Thus, we opted to take on a broad scope to explore what is out there, in terms of any literature that has looked at gender (e.g., gender-focused discussions, comparisons of gender differences, gender contrasts, etc.) in the disability sport realm. We also opted to have our review be international in scope, given the limited research that has been conducted in Canada. Thus, the research question that was decided upon was:

What are the current and historical issues of gender equity that can be understood from academic literature that has been published on gender topics in disability sport contexts?

B. Identifying relevant records

An information specialist was consulted to help collaborate with us and devise the search strategies for this review. The information specialist carried out all the searches on, in these databases: SportDiscus (EBSCOHost), Physical Education Index (Proquest), MEDLINE(R) ALL (Ovid), EMBASE (Ovid), APA PsycInfo (Ovid), and Web of Science (Clarivate Analytics). Searches were limited to records in the years 2000-2020. Records were identified using a combination of each of the databases' unique subject headings and keywords. Main concepts searched included "gender", "sex", "disability", "sport", "parasport", "athlete", and "coach". See search strategies in Appendix A.

The records generated from these searches were compiled in EndNote X9 (*EndNote*, 2018) – a reference management software – and then transferred to Covidence (*Covidence*, 2019) – an online review management software; duplicate records were removed using automated procedures of both these software. By the end of this stage, **1542 references** were sent to the next stage.

C. Records selection

Phase I: Title and abstract screening

At the first stage of screening, titles and abstracts of records were reviewed by leads and the research assistants (7 members). Each record was evaluated for inclusion and exclusion criteria:

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none">• Involves gender-focused components• Concerns any gender identities• Is based in the social sciences• Concerns people's involvement, participation, or engagement in sport	<ul style="list-style-type: none">• No gender foci• No disability foci• No sport foci• Fictional depictions in the media

<ul style="list-style-type: none"> Adopts a disability lens (e.g., in a disability or para-context, or with disabled peoples) 	<ul style="list-style-type: none"> Primarily concerned with physiological/performance-related outcomes Conference abstracts or proceedings
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In Covidence, the reviewers need to vote ‘yes’, ‘no’, or ‘maybe’ for each record based on how well the contents of the title & abstract met the inclusion/exclusion criteria. For a reviewer to vote to advance a record, the contents of the title & abstract needed to meet all the inclusion criteria, and none of the exclusion criteria. If any exclusion criterion was met, the study was voted ‘no’ for excluded; otherwise, ‘yes’ or ‘maybe’ to include or potentially include. At least two reviewers needed to vote on each record. If both reviewers chose ‘yes’, ‘yes’/‘maybe’, or ‘maybe’/‘maybe’ for the record, the record advanced to the next phase. If the votes on a record were ‘yes’/‘no’, then the record entered the conflict stage, and these reviewers needed to meet and decide together what the final decision was (‘yes’ to advance, ‘no’ to exclude). From here, **272 records** were sent to Phase II.

Phase II - Screening full-text copies of the screened literature

This stage involved retrieving all the full-text copies of the 272 records and having team members each review a portion of these records, assessing them following the same inclusion and exclusion criteria outlined previously. This time, reviewers needed to vote either ‘include’ or ‘exclude’. Only one reviewer was required to vote for each record for this stage. If the reviewer voted to ‘exclude’, they needed to choose the reason why they made the decision, based on one of the exclusion criteria. Once this stage was completed, **128 records** were selected for extraction. From here, limits of 2000-2020 were used to narrow down the selection to **109 records**.

D. Charting the data

This stage involved a comprehensive review of each record and extracting the necessary data to address the research questions of this study. Here, the data were extracted and compiled into a large table in Microsoft Excel. The extracted information included authors and year, location/country, sport, competition level, context, participants, research approach, theories/frameworks, methodologies, relevant results, and other general findings. Upon completing this stage, another review process of the extracted information was taken, to identify which of the information most closely aligned with the research question (i.e., records that help to improve our understandings of gender equity in disability sport). From here, **45 records** were selected to advance to the next stage.

E. Collating, summarizing, and reporting the results

Quantitative descriptive statistics were gathered of the charted data where applicable. These statistics included frequencies and percentages across categories of location/country, competition level, context, genders of athletes, methodological approaches, epistemological positions, and theories or conceptual frameworks. Qualitatively, the results were reviewed and categorized inductively into themes that represent convergent insights and relevant knowledge across the selected literature, while in alignment with the overall research question.

Current State of Knowledge

For a full list of academic and grey literature identified through this review, please consult the Gender+ Equity in Sport in Canada Zotero Library.

Statistics of the literature

- **Countries:**
 - o USA (12 records; 26.66%)
 - o International (7 records; 15.56%)
 - o Canada (4 records; 8.88%)
 - o Sweden (4 records; 8.88%)
 - o United Kingdom (4 records; 8.88%)
 - o Europe (General, 2 records; 2.22%)
 - o Australia, Brazil, Cuba, Denmark, France, Germany, Iran, Malaysia, Norway, Singapore, Turkey (1 record each; 2.22%)
- **Context** - Studies and participants are situated across:
 - o Paralympic (12 records; 26.67%) or elite contexts (15 records; 33.33%)
 - o Recreational contexts (7 records; 15.56%)
 - o School contexts (2 records; 4.00%)
 - o Cross-context (4 records; 8.88%)
 - o Unspecified or not applicable (4 records; 8.88%)
- **Genders** focused on:
 - o Women and girls only (26 records; 57.78%)
 - o Women and men (14 records; 31.11%)
 - o Men and boys only (4 records; 8.88%)
 - o Not applicable or unspecified (2 records; 4.44%)
 - o No other gender identities were returned from this review
- Of the 45 records in this review, 12 of these records (26.67%) explicitly mentioned being informed by a theory, theoretical approaches, conceptual frameworks or theory-based models
- **Research approaches:**
 - o Qualitative (28 records; 62.22%)
 - o Quantitative (7 records; 15.56%)
 - o Traditional reviews or insight papers (7 records; 15.56%)
 - o Mixed methods (1 record; 2.22%)
- Methodological approaches and/or epistemological positioning was mentioned in 19 records (42.22%).
- Methodologically, there was a mix of qualitative research approaches, such as:
 - o Narrative inquiry (8 records; 17.78%)
 - o Case study (7 records; 15.56%)
 - o Ethnography (3 records; 6.66%)
 - o Grounded theory (2 records; 4.44%)
 - o ~8 records (17.78%) did not explicitly state a traditional qualitative approach
- Epistemologically, many authors positioned themselves using critical theories, such as feminist theories, poststructural perspectives, and queer and crip theories, as well as constructionist paradigms.

Understanding intersections of gender, disability, and sport

Many of the records cited the existing discourses around sport, ability, and gender that influence across levels of participation and involvement in disability sport. The intersection of patriarchy and ableism can lead to perpetuating ideologies of neoliberalism, compulsory able-bodiedness, compulsory masculinity, and heteronormativity (Sparkes et al., 2014). Predominantly, this experience, in the case of disabled female athletes, has been viewed as a double oppression from minority group status as a disabled person and identification as a woman. However, Cherney et al., (2015) suggest that this viewpoint is not enough (inadequate) to represent the disabled female athlete experience. These authors suggest that in discourses around the disabled gendered athlete, there is a need for researchers to consider the intersection of these influences on the athlete's experiences, as well as the gendered context of disability sport. Disability sport offers a unique and pervasive intersection of hero stereotypes (e.g., performing acts of strength, greatness, and attributes associated with masculinity) and supercrip stereotypes (e.g., performing the "impossible" through heroism despite individual's body limitations), that together privilege the ablenational notions of gendered disability icons (i.e., the superhero, resilient, muscular and powerful, Paralympic athlete who serves their nation; Pullen & Silk, 2020). This representation is an unrealistic ideal that essentially otherizes the experiences and identities of disabled female athletes who do not fit this ideal (Thomson, 2017).

In this theme, we have detailed the nature of these intersections – how gender and ableist norms shape notions of disability sport, internalization of these notions in constructing athletic identity, and women and men's participation experiences in disability sport. Much of the insight presented in this theme are a direct result of the poststructuralist and critical perspectives used by researchers who have helped deconstruct dualistic thinking in their work (e.g., seeing the world as female/male, nature/nurture, disabled/able-bodied; Guven et al., 2019).

Existing notions of sport

Several authors have suggested that hegemonic masculinity is embedded in understandings and discourses around sport (Cherney et al., 2015; Stride, 2008; Wickman, 2007). Here, stereotypically masculine traits, are over-emphasized in sport, which can marginalize participation of those who do not align or embody these traits (i.e., sport is designed primarily for heterosexual, able-bodied, muscular, and talented men). There also exists an intersecting influence identified with masculinity and ability. For instance, (Wickman, 2007) interviewed Swedish wheelchair athletes (5 men, 4 women) about how they construct meaning in their identities. For these athletes, impairments from traumatic injury are a sign of strength, whereas diseases are not perceived in the same way (e.g., as "not so cool", Wickman, 2007, p. 160). Thus, it is almost seen as more desirable to overcome an injury-related impairment, and one which can be subject to cyborgification or modification using technology (Pullen & Silk, 2020). These notions have also contributed to the generation of supercrip stereotypes, and privileging of the experiences of the elite disabled cyborged athlete.

Many of the records reported on the discourses surrounding female disabled athletes. These athletes are sometimes seen as more restricted by their gender than their ability, and in other cases, more restricted by their ability than their gender. And at times, these discourses may operate as a downward cycle of negative influence. For instance, for a disabled female athlete, the notion of being a strong, resilient woman, is compromised by the sensitivity of having a disability condition; this sensitive then impacts concerns about physical appearance and how one is seen, which is subsequently associated with discourses of femininity (Vidaurreta & Vidaurreta, 2020). The disabled female athlete may also be viewed as double stereotyped: weak and precious, both due to their femininity and disability (Richard et al., 2017). Men and women both internalize hegemonic masculinity, ableism, and supercrip stereotypes in the constructions of their identities (Cherney et al., 2015).

Constructing Identities

Discourses of masculinity and ability in sport, whether as a product of challenging these notions or serving to reinforce them, have resulted in the perception of disabled women as un-gendered, gender-neutral, and as “the third sex” (Richard et al., 2017, p. 161). Here, the disabled female athlete is positioned both opposite to male but also opposite to traditional woman: “ambiguously positioned both inside and outside the category of woman” (Apelmo, 2012, p.10). As a result, the following subthemes discuss how disabled athletes negotiate these norms and discourses in the construction of their identities and defining how they would like to be identified.

I am an athlete first. Many disabled female athletes choose to identify by their sport, and not their disability (Spencer-Cavaliere & Peers, 2011; Vidaurreta & Vidaurreta, 2020). For instance: “I’m not a disabled sportswoman. I am a wheelchair athlete, because I don’t compete in disability. That’s not a sport.” (Richard et al., 2017, p. 162). At the same time, this identification of sport over gender, may result in an erasure of genderedness from one’s athletic identity, and in part contribute to these ungendered notions of the female disabled athlete.

Integrating masculinity and balancing with femininity. Many disabled women share that because they perceive the notion that sport is masculine and to be athletic is masculine, they construct their identities as more male (Wickman, 2007). Here, female disabled athletes claim to reject the ungendered identity, and instead choose to be more masculine (e.g., by demonstrating power, risk-taking, strength, toughness, speed, brutality) to be accepted and legitimized in a men’s world (Richard et al., 2017). Another means to reject the un-gendered identity was to construct a balanced gendered identity; here, female disabled athletes “play the game” with demonstrations of masculinity while still preserving their femininity (Apelmo, 2012; Richard et al., 2017).

Perpetuating masculinity. Disabled men are also influenced by and contribute to notions of masculinity and ableism. Male disabled athletes may emulate able-bodied sexuality while othering disabled women (Lindemann, 2010), and assert their masculinity through demonstrations of heteronormative sexual prowess (Sparkes et al., 2014). Evans et al., (2019) reported that military veterans who participated in sport expressed and internalized masculine identities – in that there was an inherent focus on strength, muscles, fitness; and less focus on striving for good health or well-being. This was not always problematic and also acted as a healing factor for veterans in facilitating their transition to a new civilian landscape. Smith (2013) suggested that for disabled men, the narrative of health may be an emergent narrative – in that disabled men with spinal cord injury learn to care more about health through their rehabilitation process (involvement in sport), but the influence of notions of masculinity challenge these men to also *not* care about their health (Smith, 2013). Here, participating in health work is both a marker of resilience-building and masculinity, but also too much care can be antithetical to the notion of masculinity.

Experiences of participation

Sport can be a positive and re-affirming experience that can encourage a sense of belonging, and can be conducive to achieving high identity and self-esteem for disabled female athletes (Fentin-Thompson, 2011). As well, team sports may offer disabled female athletes increased social support and foster a sense of community (Ashton-Shaeffer et al., 2001). As such, participation in sport can be conducive to positive development and be emancipating (Ashton-Shaeffer et al., 2001). It can communicate a challenge to ableist assumptions people may have about disability, masculinity, and ability, in that playing and performing well (winning) in sport can decouple associations of disability and incapacity (Lindemann & Cherney, 2008). Many disabled female athletes have expressed that given the positive benefits to their sense of self, they are more willing to continue participating in

sport (Vidaurreta & Vidaurreta, 2020). While women do report positive experiences in sport, this structural/societal support is much less for disabled women compared to disabled men. For example, men tend to receive greater support from adults to participate in sport (Wickman, 2015).

Disability sport can also be associated with negative experiences. In Alexander et al., (2020), retired female Paralympic athletes described experiences with male coaches who inappropriately addressed their gender and/or disability, which negatively influenced their personal and psychological well-being. As well, gender stereotypes can persist in the sport experience. The disabled women in Richard and colleagues (2017) study reported how the natural instincts of male vs. female re-surface on the field in mixed-gender sport. Even on 'biologically-level' playing fields, given the use of powerchairs, the discourses surrounding gender and sport can reintroduce immeasurable differences between men and women. Here, if women are not penalized by physiological differences, they may be punished by behavioral or even cognitive differences (Richard et al., 2017). Women's participation is often met with a negative stereotypical lens – where they are seen as rebels to the sport experience (e.g., spending their time on the floor chatting and lacking concentration or focus). Women can often choose to participate in the construction of these stereotypes in both debilitating and beneficial ways. For instance, some women may choose to integrate feminine characteristics that serve advantageous (e.g., naturally quiet, nontemperamental) in their sport participation. Yet at the same time, Richard and colleagues (2017) found that stereotypes still persist in women's discourses as well (e.g., some women resisted playing in women's only leagues to avoid girl-on-girl tensions). As well, choices in how to participate in these mixed-gender environments were almost always dominated by gender and ableist norms. For instance, women in these environments were more often relegated to less technically demanding or uninteresting roles without any justification (Richard et al., 2017).

We also observed research that looked at the unique intersection of gender, disability, and religious and cultural norms. At a systems level, in a study conducted in Iran, there are mixed views about the Islamic Women's Games, as well as regional women's only events (Limoochi & Le Clair, 2011). Many are pleased to see growth in participation as a result of these initiatives, while others believe that they are sexist and differential expectations for women are discriminatory. In a narrative case study of a female, disabled, Muslim, Paralympic powerlifting athlete, in Kelantan, Malaysia, the athlete faced unique socio-cultural restrictions resulting from expectations/requirements for Muslim women (i.e., sport and building muscle development is only for men), and how these expectations influenced her decision to participate in disability sport. Given Canada's diverse and multicultural population, it is important to understand more research in this area of how cultural norms and expectations may interact in the disabled female athlete experience to encourage more inclusion and opportunities for these populations to participate.

Rates of gender participation

This theme relates to historical understandings of gender equity in participation and involvement in disability sport at all levels (e.g., athletes, coaches, managers, policy makers, etc.). In terms of academic Canadian literature, through our search, did not return many results, nor were there many results returned of gender distributions and equity issues in participation in disability sport at an international level. The closest record that help brought some awareness to this was in Clark and Mesch's (2018) international study on the current state participation by Deaf and Hard of Hearing women in sport. These authors reported that ~30% Deaf and Hard of Hearing girls and women participate in either recreational or competitive sports, majority being between 21-30 years of age. These women served in less than 10% of leadership positions in their sport. They also reported a lack of financial support for these athletes, as well as a lack of research and documented facts on deaf/hard of hearing female athletes, coaches, leaders, trainers, referees, etc.

Intersections with media

The focus on disability sport coverage in the media has evolved significantly over time. In earlier analyses of media coverage (e.g., Maas et al. 2001), coverage overwhelmingly favoured young able-bodied athletes. Strides have been made in the past two decades to advance coverage of disabled athletes, and correspondingly drive for gender equity in media representation of men and women.

Media coverage of able-bodied athletes has been known to perpetuate gendered stereotypes of female athletes (e.g., that women should be infantilized, trivialized, and sexually objectified) – in contrast to male athletes, where their athletic skills are the main focus (unless they were involved in a scandal; de Léséleuc et al., 2010). Initial limited research on media coverage of disabled female athletes (Pappous et al., 2011) seemed to suggest that there was no difference between treatment of disabled and non-disabled female athletes. This finding suggested that disabled female athletes do not endure the same sexualization-related stigma as non-disabled female athletes, which may preclude why researchers were less interested in studying them. However, qualitative analyses at the time of the Pappous et al. 2011 paper suggested some differences, although that research was conducted with Sydney 2000 Paralympians. Female disabled athletes, while written about just as much as male disabled athletes, took up less media/photograph space than men (de Leseleuc et al., 2009). Female disabled athletes were portrayed in media coverage as genderless, aesthetically unpleasant, and asexual (de Leseleuc et al., 2009). This lack of objectification may be seen as a net positive to some, while others may argue the potential problematic nature of this - if the reasoning for such gender erasure is the focus on the disability; in that it perpetuates the notion that disabled women should be infantilized, and seen as those without gender (Brooke, 2019; Buysse & Borcharding, 2016).

Further media analyses in the past decade have brought to light the glaring differences in how disabled men and women are covered. In a newspaper analyses conducted across China, Italy, New Zealand, South Africa, and the USA, 15 days before the Beijing 2008 Paralympics, most newspapers covered men more than women (Buysse & Borcharding, 2016). The countries that challenged this norm included the USA, in which the newspapers looked at pictured disabled men and women equally, and New Zealand newspapers portrayed twice as many disabled women as disabled men (Buysse & Borcharding, 2016). Indeed, in contemporary media coverage, the disabled female athletes may still be the object of the following stereotypes: divestment of femininity, trivialization, and infantilization (de Leseleuc et al., 2009). There is a de-emphasis on the abilities of athletes (Weaving & Samson, 2018). Disabled men are more likely to be depicted in action poses, while women are seen more often off the field, not demonstrating any athletic abilities, and not being recognized as athletes as often as men (Brooke, 2019; Buysse & Borcharding, 2016). In the media, the genderlessness carries over beyond athletic involvement, where disabled women were often not pictured with their families, unlike disabled men who may be pictured with their partners (Brooke, 2019; Wanneberg, 2018).

In scenarios when gender is a consideration in the media, the favoured depictions of female disabled athletes are those aesthetically pleasing or presentable women (de Leseleuc et al., 2009). Indeed, this evidence of continued sexualization is exemplified in a unique study by Weaving et al. (2018), where they examined four images of female Paralympians who posed nude in ESPN The Magazine's body issues. These authors found that discourses of heteronormativity and ableism were applied to outline the concerns with female Paralympic representation in The Body Issue. The authors posited that the photos were subject to ableist and sexist values, in that the photos de-emphasized the disabilities of the athletes, while emphasising femininity and heteronormality. The authors argued that these photos perpetuated the notion "that femininity and heterosexuality are of more value than athleticism," and offered "a narrow scope of what it looks like to be a female Paralympian" (Weaving et al., 2018, p. 97).

Recreational research

The existing literature in disability sport is heavily focused on elite and Paralympic sport contexts. Lesser attention has been given to understandings of gender in recreational or school sport contexts. In this limited literature, Stride (2008) looked at the benefits of an intervention with disabled girls in an after-school football club, in offering structured play and skill development opportunities to girls, as well as the development of friendships between coaches and disabled and non-disabled players. These benefits also carried forward to enhance the likelihood of girls' participation in informal play opportunities (e.g., recess) – although this context did reinforce hegemonic masculinity (e.g., boys dominate the sport and take on a majority of actions and means of participation). Challenges for such interventions in communities span across limited funding, resources, transportation, and geographical spread.

Anderson (2009) also explored recreationally competitive contexts for disabled girl athletes. Here, the girls were influenced to participate by identifying with female role models in wheelchair sport – where being female was a source of pride. However these girls also identified that this same uniqueness of female disabled athletes that may have pulled them to the sport, may have also inhibited other girls from participating, which helps to partially explain low participation rates of disabled girls and women in sport.

Strategies to increase women's positive involvement and participation in disability sport

Technology helps contribute to men and women having equal physical footing, as they require to use the same motor behaviours to operate equipment with little contribution of biological differences (Richard et al., 2017).

Reverse integration contexts may be an opportunity to promote gender equity. Reverse integration contexts are spaces where both disabled and able-bodied athletes can participate in adapted/disability sports – promoting body equity. Wheelchair athletes in the Spencer-Cavaliere and Peers (2011) collaborative study reported that they saw both no differences between classifiable (e.g., those with a disability that may limit their mobility/function) and unclassifiable athletes, and support the promotion of reverse integration contexts. These athletes see disability sport as just another type of sport, where the uses of wheelchairs or mobility equipment as part of the sport rather than as “a means of confinement” (p. 303).

Discussion: Gaps and Future Directions

Current gaps

- There is little research to draw on in understanding gender equity in disability sport that is situated in Canada.
- There is a gap in understanding participation rates in disability sport by gender across levels of involvement (e.g., organizational, coaching, athletic, etc.) and across context (e.g., elite, Paralympic, recreational, school, etc.), from a Canadian (and even International) perspective.
- ~75% of research in disability sport and gender does not employ any theory or conceptual framing.
- ~45% of research in disability sport and gender does not explicitly address epistemological positioning and/or methodological approaches.
- All the records returned in this review involved either men (male) or women (female) identities, with no records concerning any other identified gender identities.
- Much of the research is situated in elite and Paralympic contexts, with less focus on recreational, school, and developmental contexts for disability sport.

Future research directions

Bringing an explicit gender equity research focus to the disability sport contexts in Canada.

Understanding rates of participation, experiences of participation, critical perspectives on the disabled gendered sport experience, and how the influences of media (e.g., social media, magazines, internet news, etc.) and context (e.g., elite, Paralympic, recreational) can contribute to the construction of these experiences. The context of these gaps is based on literature that is largely situated on experiences and discourses of gender and disability sport outside of Canada. There is little literature which specifically focuses on gender and disability in Canada, and thus all these areas of focus discussed below need to be incorporated into Canadian contexts.

Use of critical theory approaches

The theoretical approaches used to study disability sport experiences are typically gender-neutral. We encourage that future research in disability sport incorporate critical theories (e.g., feminist theory, gender theory, queer theory). Critical theories can be valuable in the recognition of pervasive discourses around sexuality and gender that perpetuate the influence of neoliberal, nationalist, ableist, and able-nationalist ideologies on athletes' experiences.

More collaborative approaches and action research

More research should operate from the context outward. Rather than research that is driven by researchers and scholars interests in topics, we should push for more research on topics that are most relevant to those who experience disability, as well as those who can contribute to social action in the contexts in which the research is done. Collaborative community-based approaches may be particularly salient here. One necessary context is football (soccer) – the most popular sport internationally is the only Paralympic sport in which women still do not compete. Action research in this area would be necessary to promote a reversal of this situation. Given the discussions we brought forth about the lack of media representation and how a motivator for children to participate in disability sport is having disabled female athletes as role models, this may be an appropriate and fruitful opportunity to explore.

Diversity in sport contexts

There is a clear emphasis on the research and study of Paralympic and elite athletes. Part of this emphasis can be influenced by – and contribute to – neoliberal power structures where the Paralympic athlete is the hyper-visible representation of overcoming adversities and demonstrations of strength and masculinity, despite individual disabilities. This predominant focus on elite athletes in elite contexts can indirectly “other” and marginalize discourses and focus on athletes and peoples who do not fit this category. Thus, we recommend more research be conducted in gender and disability sport looking at non-elite contexts and non-elite athletes (e.g., people who engage in sport in recreational contexts, schools, community programs, etc.).

The role of technology to “level the playing field”

A unique area to explore that will be emerging and influential in the coming years is the influence of technology and cyborgification on gendered and disabled discourses and meaning generation. Cyborgification offers an opportunity to paradoxically endorse and challenge the notion of the “level playing field”. For example, powerwheelchairs may offer a level playing field for men and women in minimizing biological inequalities between them. Technology can also be inseparable from the person, and in these cases of the cyborg athlete, the idea of level playing fields, and other neoliberalist and masculine notions of the “athlete who overcomes despite” are challenged. This

would be a useful area to further explore and understand how technology can be leveraged in supporting gender equity.

Limitations of our review

- When performing a review of disability sport, it is easy for the authors to straddle the line between looking at disability sport as a monolithic experience. In reality, each disability sport may offer unique experiences. While in our search strategies we incorporated many different terms to accommodate different sports, when synthesizing these different sport experiences to find commonalities, we risk becoming perpetrators and enablers of the generalization of the disability sport experience, a by-product of ableist ways of thinking.

Conclusions

This rapid scoping review included international literature published in English. It discusses gender and its interaction with disability sport, at all levels of people involved in sport. The search of six databases initially yielded 1542 records, and two phases of screening resulted in 128 records selected for extraction. Examining these records for content related to context, sample, methodologies, and results allowed the research team to further narrow the search to 45 records for synthesis. Our findings highlight the perseverance of ableist and masculine notions of sport, including in the media, that shape the experiences of disabled athletes, both male and female. We found research that emphasized the double effect of being a woman and disabled athlete. These factors combined to challenge athletes with a disability when it comes to constructing their identities. As well, and importantly for Canada and our multicultural society, evidence indicates that different cultural and religious norms also have an effect on sport participation for disabled women and girls. We uncovered important gaps in the literature related to gender and disability sport research such as: participation and participation rates, beyond the high performance context; non-binary gender identities and disability sport; and explicitly stated theoretical and methodological research approaches. Moving forward, a review such as this provides a solid foundation upon which we can build a research strategy for gender+ and disability sport. Potential future research should include more collaborative approaches that involve those Canadians directly involved such as disability sport participants and others who can impact their sport experience, especially at the community sport level; and more use of various critical theory approaches that can better unpack the pervasive discourses around sexuality and gender that influence athletes' experiences.

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Appendix A: Search Strategy

Search performed May 25, 2020

SportDiscus (EBSCOHost)

Search History

#	Query	Results
S22	S9 AND S21	987
S21	S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20	94,462
S20	sexism* or chauvinis* or (sex* N3 (minorit* or discriminat* or differen* or chang* or biais* or prejudic* or stereotyp*))	17,653
S19	"trans female*" or "trans male*" or "trans man" or "trans men" or "trans people*" or "trans person*" or "trans woman" or "trans-sexualit*"	12
S18	"same sex" N2 (relation* or attract*)	77
S17	"sex change*" or "sex reassign*" or "sex reversal*" or "sex transform*" or "sex transition*"	78
S16	LGB* or GLB* or lesbian* or gay* or homosexual* or bisexual* or bicurious* or transgender* or crossgender* or transsexual* or queer* or heteroflexib*	6,509
S15	gender* or femininity or masculinity or ((male* or female* or man or woman or men or women or girl* or boy* or adolescen* or teen* or young) N3 (athlete* or sport* or coach*))	78,404
S14	((DE "WOMEN with disabilities" OR DE "GIRLS") AND (DE "WOMEN & sports" OR DE "WOMEN athletes" OR DE "WOMEN'S sports")) OR (DE "MALE athletes" OR DE "MALE college athletes" OR DE "MALE cross-country runners" OR DE "MALE junior high school athletes")	900
S13	DE "LESBIAN athletes" OR DE "LESBIAN bodybuilders" OR DE "LESBIAN soccer players" OR DE "LESBIAN softball teams" OR DE "LESBIAN tennis players" OR DE "LESBIAN coaches (Athletics)" OR DE "LESBIANS & sports"	43
S12	DE "TRANSGENDER athletes" OR DE "TRANSGENDER bodybuilders" OR DE "TRANSGENDER college athletes" OR DE "TRANSGENDER soccer players" OR DE "TRANSGENDER tennis players" OR DE "TRANSGENDER people & sports"	70
S11	(DE "LGBTQ athletes" OR DE "BISEXUAL athletes" OR DE "GAY athletes" OR DE "LGBTQ bodybuilders" OR DE "LGBTQ professional athletes" OR DE "LGBTQ soccer	144

	players" OR DE "LGBTQ tennis players" OR DE "TRANSGENDER athletes" OR DE "LGBTQ coaches (Athletics)" OR DE "LGBTQ people & sports")	
S10	(DE "GENDER" OR DE "GENDER differences (Sociology)" OR DE "GENDER identity" OR DE "GENDER role" OR DE "GENDER in dance" OR DE "GENDER inequality" OR DE "SEX discrimination" OR DE "MASCULINITY in sports")	3,610
S9	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8	19,161
S8	goalball* or boccia* or motorsoccer* or "5-a-side Soccer*" or "7-a-side soccer*" or "sitting volleyball*" or "football 5-A-Side*" or "Able Sail*"	303
S7	wheelchair* N3 (basketball* or hockey* or rugby* or soccer* or tennis* or "track and field*" or curling* or fencing* or "road racing" or dance* or bowling*)	2,596
S6	(basketball* or hockey* or cycl* or football* or "martial art*" or judo* or softball* or swim* or tennis* or "track and field*" or Bocce or bowling* or cricket* or equestrian* or "figure skat*" or "Speed Skat*" or floorball* or soccer* or golf* or gymnast* or handball* or kayak* or canoe* or netball* or powerlift* or "roller skat*" or sailing* or snowboard* or snowshoeing* or skiing* or softball* or triathlon* or biathlon* or volleyball* or curling* or "Waterski Wakeboard*" or shooting* or rowing* or athletics or archery) N3 (blind? or deaf* or disabilit* or disable* or handicap* or adapted or adaptive*)	9,738
S5	((sport* or athlete* or coach*) N3 (disabilit* or disable* or wheelchair* or blind? or deaf* or handicap*)) OR (sport* N3 (adapted or adaptive*))	12,228
S4	parasport* or "para sport*" or paralympi* or "special olympi*" or paraswim* or "para swim*" or parahockey* or "para hockey*" or "para soccer*" or "para rugby*" or "para tennis*" or "para judo*" or "para basketball*" or "para cycl*" or "para ski*" or "para alpine*" or "para snowboard*" or "para table tennis*" or "para canoe*" or "para teakwondo*" or "para triathlon*" or "para athletic*" or "para powerlift*" or "para archer*" or "para row*" or "para badminton*" or "para equestrian*"	Display
S3	((DE "GOALBALL") OR DE "BOCCIA (Game)" OR DE "MOTORSOCCER" OR DE "NATIONAL Veterans Wheelchair Games" OR DE "WHEELCHAIR basketball" OR DE "WHEELCHAIR bowling" OR DE "WHEELCHAIR dance sport" OR DE "WHEELCHAIR fencing" OR DE "WHEELCHAIR hockey" OR DE "WHEELCHAIR road racing" OR DE "WHEELCHAIR rugby" OR DE "WHEELCHAIR soccer" OR DE "WHEELCHAIR sports competitions" OR DE "WHEELCHAIR tennis" OR DE "WHEELCHAIR track & field")	Display
S2	DE "ATHLETES with disabilities" OR DE "AUTISTIC athletes" OR DE "BASEBALL players with disabilities" OR DE "BASKETBALL players with disabilities" OR DE "BLIND athletes" OR DE "DEAF athletes" OR DE "SKIERS with disabilities" OR DE "WOMEN athletes with disabilities"	Display

S1	DE "PARALYMPICS" OR DE "SPECIAL Olympics" OR DE "SPORTS for people with disabilities" OR DE "ARCHERY for people with disabilities" OR DE "BASKETBALL for people with disabilities" OR DE "CRICKET for people with disabilities" OR DE "CYCLING for people with disabilities" OR DE "DIVING for people with disabilities" OR DE "FOOTBALL for people with disabilities" OR DE "GOLF for people with disabilities" OR DE "GYMNASTICS for people with disabilities" OR DE "HANDBALL for people with disabilities" OR DE "HANG gliding for people with disabilities" OR DE "HOCKEY for people with disabilities" OR DE "MARTIAL arts for people with disabilities" OR DE "MOTORCYCLING for people with disabilities" OR DE "MOTORSOCCER" OR DE "ROCK climbing for people with disabilities" OR DE "RUGBALL" OR DE "RUNNING for people with disabilities" OR DE "SHOOTING for people with disabilities" OR DE "SKATING for people with disabilities" OR DE "SKIING for people with disabilities" OR DE "SKYDIVING for people with disabilities" OR DE "SNOWSHOEING for people with disabilities" OR DE "SOCCER for people with disabilities" OR DE "SOFTBALL for people with disabilities" OR DE "SPORTS for children with disabilities" OR DE "SPORTS for people with mental disabilities" OR DE "SPORTS for people with visual disabilities" OR DE "SURFING for people with disabilities" OR DE "SWIMMING for people with disabilities" OR DE "TENNIS for people with disabilities" OR DE "VOLLEYBALL for people with disabilities" OR DE "WEIGHT training for people with disabilities" OR DE "WHEELCHAIR sports" OR DE "WINDSURFING for people with disabilities" OR DE "WORLD Games for the Deaf"	Display
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Results: **695** references retrieved when removing magazine articles, but keeping everything else (books, thesis, research articles, etc.) No language limit, nor publications years limit added.

MEDLINE(R) ALL (Ovid, 1946 to May 21, 2020)

1. Sports for Persons with Disabilities/

2. (parasport* or para sport* or paralympi* or special olympi* or paraswim* or para swim* or parahockey* or para hockey* or para soccer* or para rugby* or para tennis* or para judo* or para basketball* or para cycl* or para ski* or para alpine* or para snowboard* or para table tennis* or para canoe* or para teakwondo* or para triathlon* or para athletic* or para powerlift* or para archer* or para row* or para badminton* or para equestrian*).ti,ab,kf.

3. ((sport* or athlete* or coach*) adj3 (disabilit* or disable* or wheelchair* or blind? or deaf* or handicap*).ti,ab,kf.

4. (sport* adj3 (adapted or adaptive*).ti,ab,kf.

5. ((basketball* or hockey* or cycl* or football* or martial art* or judo* or softball* or swim* or tennis* or "track and field*" or Bocce or bowling* or cricket* or equestrian* or figure skat* or Speed Skat* or floorball* or soccer* or golf* or gymnast* or handball* or kayak* or canoe* or netball* or powerlift* or roller skat* or sailing* or snowboard* or snowshoeing* or skiing* or softball* or triathlon* or biathlon* or volleyball* or curling* or Waterski Wakeboard* or shooting* or rowing* or athletic* or archer*) adj3 (blind? or deaf* or disabilit* or disable* or handicap* or adapted or adaptive*).ti,ab,kf.

6. (wheelchair* adj3 (basketball* or hockey* or rugby* or soccer* or tennis* or "track and field*" or curling* or fencing* or road racing or dance* or bowling*).ti,ab,kf.

7. (goalball* or boccia* or motorsoccer* or "5-a-side Soccer*" or "7-a-side soccer*" or "sitting volleyball*" or "football 5-A-Side*" or "Able Sail*").ti,ab,kf.

8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. exp Gender Identity/
10. Sex Characteristics/
11. Sex Factors/
12. Sexism/
13. "sexual and gender minorities"/ or intersex persons/ or transgender persons/
14. bisexuality/ or exp homosexuality/ or transsexualism/
15. (gender* or femininity or masculinity).ti,ab,kf.
16. ((male* or female* or man or woman or men or women or girl* or boy* or adolescen* or teen* or young) adj3 (athlete* or sport* or coach*)).ti,ab,kf.
17. (LGB* or GLB* or lesbian* or gay* or homosexual* or bisexual* or bicurious* or transgender* or crossgender* or transsexual* or queer* or heteroflexib*).ti,ab,kf.
18. (sex change* or sex reassign* or sex reversal* or sex transform* or sex transition*).ti,ab,kf.
19. (same sex adj2 (relation* or attract*)).ti,ab,kf.
20. (trans female* or trans male* or trans man or trans men or trans people* or trans person* or trans woman or trans sexualit*).ti,ab,kf.
21. (sex* adj3 (minorit* or discriminat* or differen* or chang* or biais* or prejudic* or stereotyp*)).ti,ab,kf.
22. (sexism* or chauvinis*).ti,ab,kf.
23. 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22
24. 8 and 23

Results: **311** references retrieved; no limits/filters added.

APA PsycInfo (Ovid, 1806 to May Week 3 2020)

1. (parasport* or para sport* or paralympi* or special olympi* or paraswim* or para swim* or parahockey* or para hockey* or para soccer* or para rugby* or para tennis* or para judo* or para basketball* or para cycl* or para ski* or para alpine* or para snowboard* or para table tennis* or para canoe* or para teakwondo* or para triathlon* or para athletic* or para powerlift* or para archer* or para row* or para badminton* or para equestrian*).tw.
2. ((sport* or athlete* or coach*) adj3 (disabilit* or disable* or wheelchair* or blind? or deaf* or handicap*)).tw.
3. (sport* adj3 (adapted or adaptive*)).tw.
4. ((basketball* or hockey* or cycl* or football* or martial art* or judo* or softball* or swim* or tennis* or "track and field*" or Bocce or bowling* or cricket* or equestrian* or figure skat* or Speed Skat* or floorball* or soccer* or golf* or gymnast* or handball* or kayak* or canoe* or netball* or powerlift* or roller skat* or sailing* or snowboard* or snowshoeing* or skiing* or softball* or triathlon* or biathlon* or volleyball* or curling* or Waterski Wakeboard* or shooting* or rowing* or athletic* or archer*) adj3 (blind? or deaf* or disabilit* or disable* or handicap* or adapted or adaptive*)).tw.
5. (goalball* or boccia* or motorsoccer* or "5-a-side Soccer*" or "7-a-side soccer*" or "sitting volleyball*" or "football 5-A-Side*" or "Able Sail*").tw.
6. (wheelchair* adj3 (basketball* or hockey* or rugby* or soccer* or tennis* or "track and field*" or curling* or fencing* or road racing or dance* or bowling*)).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. gender identity/ or gender nonconforming/ or exp lgbtq/ or transgender/ or transsexualism/ or femininity/ or gender dysphoria/ or gender equality/ or masculinity/ or sex roles/ or gender reassignment/

9. sexual orientation/ or asexuality/ or sociosexual orientation/ or gender nonconforming/ or "homosexuality (attitudes toward)"/ or "transgender (attitudes toward)"/ or same sex marriage/ or same sex couples/ or sexual minority groups/
10. sexism/ or sex discrimination/
11. (gender* or femininity or masculinity).tw.
12. ((male* or female* or man or woman or men or women or girl* or boy* or adolescen* or teen* or young) adj3 (athlete* or sport* or coach*)).tw.
13. (LGB* or GLB* or lesbian* or gay* or homosexual* or bisexual* or bicurious* or transgender* or crossgender* or transsexual* or queer* or heteroflexib*).tw.
14. (sex change* or sex reassign* or sex reversal* or sex transform* or sex transition*).tw.
15. (same sex adj2 (relation* or attract*)).tw.
16. (trans female* or trans male* or trans man or trans men or trans people* or trans person* or trans woman or trans sexualit*).tw.
17. (sex* adj3 (minorit* or discriminat* or differen* or chang* or biais* or prejudic* or stereotyp*)).tw.
18. (sexism* or chauvinis*).tw.
19. 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18
20. 7 and 19

Results: **221** references retrieved; no limits/filters added.

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 May, 2020.