PLAY FINDS A WAY THROUGH INCLUSIVE PLAYGROUNDS



2023

FINAL RESEARCH REPORT

PLAY FINDS A WAY

THROUGH INCLUSIVE PLAYGROUNDS

PREFACE

OVERVIEW

Play Finds A Way Through Playgrounds (PFW) is a research project that focuses on equal and equitable access and participation in playgrounds and their surrounding environments for all children and their families.

As part of this research, our team explored the experiences of children, parents, and rehabilitation and educational professionals with Canadian Tire Jumpstart Charities' Inclusive Playgrounds. We began interviews with families and professionals in the Spring 2019 at three of the Jumpstart playground locations: Charlottetown, Prince Edward Island; Calgary, Alberta; and Prince Albert, Saskatchewan.

As we continued with this research into 2021, we focused on speaking with children experiencing disability, their parents and caregivers, and rehabilitation professionals about their experiences of the Jumpstart playgrounds located in Toronto, Ontario; Edmonton, Alberta; and Calgary, Alberta.

Through this research, we aimed to advance knowledge about the interactions between childhood disability, play, and design.

CONTACT

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FINAL REPORT PREPARED BY:

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FUNDING

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Canadian Disability Participation Project
The Steadward Centre for Personal and Physical
Achievement

SPECIAL THANKS

Thank you to the researchers, research assistants, collaborators, and participants who made this project possible.

CITATION

The University of Toronto. (2023). Play Finds A Way Through Inclusive Playgrounds: Final Research Report. The University of Toronto, Toronto, ON, Canada.



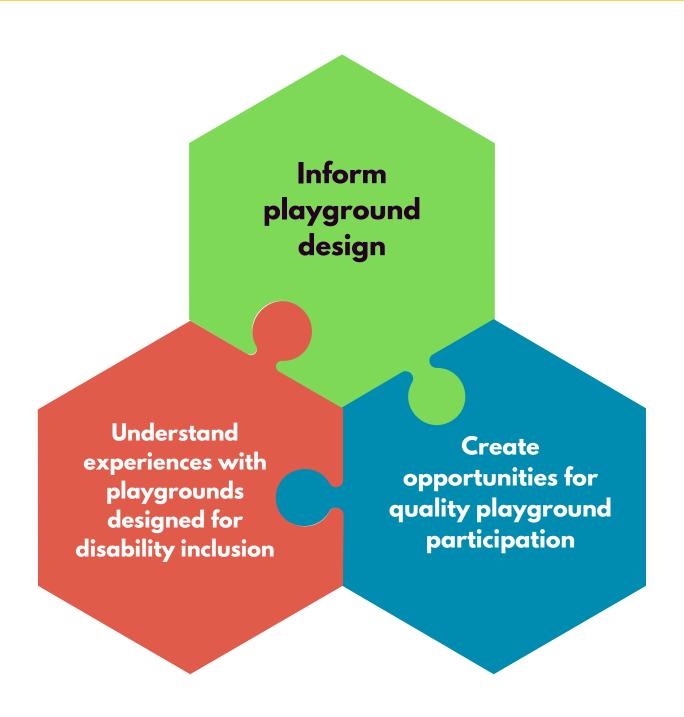






RESEARCH AIMS

Since we began this research project, our overarching aim has been to advance knowledge about the interactions between childhood disability, play, and design. Specifically, our research aimed to:



This report provides a summary of these three research aims.

INFORM PLAYGROUND DESIGN

In line with **Aim 1** of the project, rigorous and systematic analyses of the peer-reviewed (published) and grey literature were conducted on playground design, with the goal of better understanding how playgrounds can be designed to support play among children experiencing disability.

In 2019, our team conducted a scoping review on current evidence-informed recommendations for designing inclusive playgrounds. This review was accompanied by a 2-page Inclusive Playground knowledge product outlining our **13 evidence-informed recommendations** for designing inclusive playgrounds.



Front. Rehabilit. Sci., 24 May 2021 Sec. Disability, Rehabilitation, and Inclusion https://doi.org/10.3389/fresc.2021.664595



https://cdpp.ca/resources-and-publications/inclusive-playgrounds-resource

Playground Elements	Recommendations
1. Entry Points	1.1. Entrance to the playground space is wide and free of any obstacles 1.2. Wide, flat, and firm pathways from the entrance to the playground 1.3. Enclosing the playground to prevent children from straying (<i>Promising Practice</i>)
2. Surfacing and paths	2.1. A flat uniform surface that consists of material that is moderately firm and stable 2.2. Ramps that provide access to and between elevated play components
3. Features to foster inclusive play	3.1. Play equipment accessible to all children 3.2. Variety of play equipment that provides appropriate challenges for children of all ages and abilities 3.3. Different types of sensory play components that are spread out within the play space to reduce overstimulation 3.4. Solitary play components for escaping overstimulation 3.5. Play components shaped in recognizable designs that allow for creative and imaginative pursuits 3.6. Informational features to aid with spatial orientation, communication, and guidance on proper use of equipment 3.7. Shaded spaces to aid with temperature regulation
4. Staffing/Supervision	4.1. Trained staff present in the play space to support play for all children
5. Design Process	User involvement (families of children with disabilities and representatives from disability organizations) in the design process

INFORM PLAYGROUND DESIGN

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In 2021, we extended our peer-reviewed work by creating an extensive **Playbook** that outlines considerations and strategies for creating inclusive playgrounds. The Playbook is open access and available in both English and French.





www.hollandbloorview.ca/playgroundsplaybook

To date, the Playbook has been disseminated directly or via presentations to the following user groups:

- Parents and parent associations
- Municipal recreation leaders
- Parks consultants
- Teachers and school administrators
- Community league members







New Online Users: July 2022- November 2023

INCLUSIVE PLAYGROUND EXPERIENCES

Aim 2 of the project focuses on our team's collective commitment to better document and understand how communities use playgrounds that are designed to be inclusive to children experiencing disability. Research related to Aim 2 has been carried out using observational and interview methods.

Observations

In Fall 2019, trained research assistants conducted on-site observations (using a standardized tool) at the Earl Bales Jumpstart Playground in Toronto. The main findings from this research are (a) the playground areas are highly utilized by both males and females and children of various ages, (b) most children were observed to engage in active or very active play and with others, and (c) one child with a visible disability was observed over the 8-day observation period.

1332 child observations

One child was observed using a mobility device

of children observed were engaging in active or very active play

74% of children observed were playing with others

of play behaviours were categorized as functional



The results of the observations were published in a peer review journal.

For details on the study, please see: James ME, Jianopoulos E, Ross T, Buliung R, Arbour-Nicitopoulos KP. (2022). Play behaviours and interactions among children on an inclusive playground setting. International Journal of Environmental Research and Public Health, 19, 13648. https://doi.org/10.3390/ijerph192013648.

Key Takeaways

- The playground was highly utilized by both males and females, who were mainly 0-12 years old.
- Universal Design is necessary but may not be a sufficient approach for encouraging playground play among children who use mobility devices.

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Interviews and Focus Groups

From Spring 2019 to Fall 2023, our research team conducted interviews (on the playgrounds & virtually) with children, parents, and rehabilitation and educational professionals to learn more about their experiences with the Jumpstart inclusive playgrounds. We have had the opportunity to speak with individuals from five of the cities where a Jumpstart Inclusive Playground was built: Charlottetown PEI, Toronto ON, Prince Albert SK, Calgary AB, and Edmonton AB.







40 parents (28 with children with disability)





25 professionals (rehabilitation & education)

The following knowledge translation activities have been produced, or are in production, based on our team's analysis of the interview data (see Appendix for full references to these assets):

Parents' perspectives on playgrounds designed for disability inclusion

inclusion

Status Published

Inclusive playground experiences of families of disabled and nondisabled children

Rehabilitation professionals' perspectives on playgrounds designed for disability inclusion

Families' experiences of playgrounds designed for disability inclusion

Knowledge translation of inclusive playground research

Research article: The perspectives on parents of disabled and nondisabled children at playgrounds designed for disability

Research article: In the form of a creative nonfiction, the experience of a playground designed for disability inclusion from the perspective of families of children with and without disability

Research article: Rehabilitation and educational professionals perspectives on the impact and potential of inclusive playgrounds in childhood development and therapeutic purposes

Comic Strip: Knowledge translation of the creative nonfiction article into comic format. Potential for use in public engagement and consultation about playgrounds

Presentations & Resources: Items include in-person presentation, professional development, graphic resources, and social media to communicate findings with public and stakeholders

peer-review

Submitted for

To be submitted for peer-review in Spring 2024

Completed

Completed

INCLUSIVE PLAYGROUND EXPERIENCES

Aim 2 of the project focuses on our team's collective commitment to better document and understand how communities use playgrounds that are designed to be inclusive to children experiencing disability. Research related to Aim 2 has been carried out using observational and interview methods.

What we heard...

The following are sample quotes from our interviews with parents, children (including siblings), and rehabilitation & education professionals about their experiences using the Jumpstart Inclusive Playgrounds.

Theme	Sample Quotes from Interview Transcripts
Rich Play Experiences	I can play and I can have fun. I am worth it and I am important. Somebody recognized that because look what they created. I matter toothat is the message that gets sent Parent, on behalf of their disabled child Your park is amazing. I could go there a thousand times and not get boredI would go on there a million times and just have so much fun Nondisabled child Thank you for thinking like this. I think that this is a start. It is first step from traditional playgrounds. It is slightly more, I think this is inclusive of kids with really mild to moderate disabilities, not fully inclusive, but it is a big step Recreation programmer It is so much better than me sitting at a table with them and trying to teach them something so if we can play with them in authentic situations and most of these kids have come to playgrounds before and just had limited use of themthey like to play and that is how they learn best Speech Language Pathologist
Parent Labour	Sometimes I get tired of taking advantage of these teachable moments. I don't go to the playground to be a teacher, I go to the playground just like any other parent Parent of a disabled child Usually I need another parent to be there to hold the swing steady so I can just physically get him inI guess that would [be my] interactions with other parents Parent of a disabled child
	When we go here, it is just like whoa, it's everything that me and [my sibling] want to do, so maybe we could do that together Sibling of a disabled child

Family Connections

I feel like we can go here and be like any other family. It doesn't feel like we are faced with barrier after barrier. It is freedom for all of us. - Parent of a disabled child

I can chase them right through the whole park. I can get up there [to the playground structure] and I have played tag with them up here...Even being in the wheelchair, I can get right to where they are at. - Parent who uses a wheelchair.

I like the idea of having a place (...) where you can just create that space where you can hang out a little bit longer. (...) it's more of a social based thing too as well in terms of finding those opportunities to get support like community aids and things like that. - Parent of a disabled child

INCLUSIVE PLAYGROUND EXPERIENCES

Aim 2 of the project focuses on our team's collective commitment to better document and understand how communities use playgrounds that are designed to be inclusive to children experiencing disability. Research related to Aim 2 has been carried out using observational and interview methods.

Recommendations for Practice and Policy

The intentional design for accessibility (e.g., rubberized and flat surfaces, double-wide ramping) and variety in play opportunities (e.g., sensory and motor play) are two critical aspects that participants expressed to be present within the Jumpstart Inclusive Playgrounds in their communities. Families have also voiced though, that there is a necessity to consider disability inclusion (e.g., education) in the social environment and community-making of the playground.

The following **FOUR recommendations are based on our research team's insights** gained from interviews with families and professionals, rigorous peer-reviewed and grey literature reviews, as well as participating in the Jumpstart Playground Cohort meetings and discussions with municipal staff, planners, and accessibility committees:

Community-level strategies for challenging stigma and stereotypes of disabled children

- Consider intervention approaches to foster social environments, e.g. municipal and/or educational organizations initiate play and social inclusion across contexts
- o Train recreation and parks staff to address inclusivity within public play spaces
- Provide opportunities for community members to learn, and to be allies, with families experiencing disability

High usage of inclusive playgrounds can create additional barriers: Mitigate this effect through additional and varied play opportunities

- Continue to build and upgrade playgrounds to be more inclusive and increase the number of inclusive playground sites for communities
- Facilitate play and inclusive use of the playground through the support of trained play leaders, programming hours, and/or sensory hours for playground use

Longer-term evaluation of usage and experiences: Revisit the playground sites to gain a better understanding of community uptake and sustainability

- Does visitation and usership change over time?
- How do parent and child perceptions change as the novelty of the playground decreases?
- What role does the inclusive playground continue to have in community life?

Prioritize families experiencing disability in the consultation of playground creation

o Engage with families prior to playground builds to understand the needs and interests of each community

QUALITY PLAYGROUND PARTICIPATION

In partnership with The Steadward Centre, **Aim 3** of the project has focused on the creation of evidence-based resources (Blueprints for Quality Playground Participation) to support play leaders and caregivers in facilitating quality experiences on the playground for children experiencing disability.

The Process

During this phase of the project, we focused on developing evidence-based strategies for play leaders and caregivers to support quality experiences on playgrounds for children experiencing disability using the following data sources:

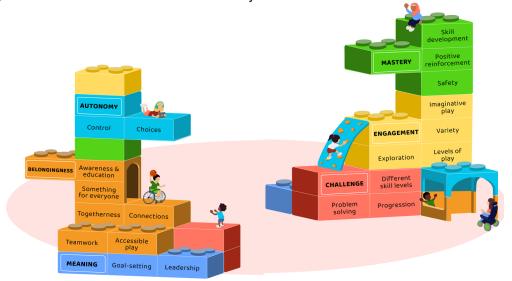


54 playground interview transcripts were coded to determine **key strategies** that can foster quality participation on playgrounds

8 parents & 14 play programmers completed a survey indicating their (dis)agreement with the proposed 25 strategies

Quality Participation Strategies

Using the Canadian Disability Participation Project's Quality Participation Framework as a guide, we created two Quality Participation Blueprints for Playgrounds that consisted of the final 20 strategies. The **Programmer edition** of the Playground Blueprint was released May 2023 (with an accompanying version in French now available). The **Caregiver edition** will be released in February 2024.

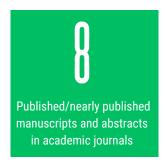






SUMMARY OF KNOWLEDGE OUTPUTS

Our team is committed to ensure that the results from this project be disseminated both within and outside of academia to have the greatest impact possible on play for children experiencing disability. A summary of the different knowledge outputs that we have collectively have contributed to is outlined. For a full listing of the project knowledge outputs refer to the end of this report.

















Inclusive Play Leadership Resource, created in partnership with The Steadward Centre. This resource includes an entire module on inclusive playgrounds and is hosted on the Jumpstart Coaching Kids of All Abilities platform



FEATURED KNOWLEDGE OUTPUT: INCLUSIVE PLAY LEADERSHIP



Inclusive Play

Leadership

Online Learning Resource

The Inclusive Play Leadership Resource is **Online Training Modules** for children's recreation and physical activity
leaders. Created in partnership with The Steadward Centre,
this resource includes an entire module on inclusive
playgrounds and is hosted on the Jumpstart Coaching Kids
of All Abilities platform. **Leaders learn to facilitate play and games for children of all abilities!**



Implications

Through the Play Finds A Way research project, we have experienced rich collaboration, engagement, and connection with the families, children, and municipalities that create the communities of the Jumpstart inclusive playgrounds, along with the Jumpstart Inclusive Play team. Below we highlight key implications of this research, the resulting collaborations, and areas of future inquiry in research, practice, and policy.

1

Community Disability Awareness and Education

Our research indicates the continued need for community-level strategies to challenge disability stigma and stereotypes in play. We created and disseminated evidence-based resources on inclusive play advocacy and leadership (e.g., Inclusive Play Leadership Training, Programmer and Caregiver Blueprint for Building Quality Participation on Playgrounds) and led workshops for municipal staff on inclusive play. Plans are underway to build upon this work to enhance scope and uptake in practice.

Inclusive Outdoor Play as a Research Priority

Our knowledge outputs on inclusive playgrounds (e.g., research papers, design recommendations, training resources, tools to support quality play) have set the foundation for the newly established Play Team of the Canadian Disability Participation Project. As part of the Play Team, community spaces and places (including playgrounds) will be further examined to identify and evaluate putative strategies to enhance quality participation in play for disabled children and their families.

3

Child- and Accessibility- Friendly Methods and Knowledge Tools

As part of our team's commitment to inclusive research practices, we piloted a play-along interview strategy and supporting tools (e.g., visual schedules, GoPro with alternate mic attachments for those using mobility devices), with the intent of enhancing the inclusivity of our methods to disabled children. Many of our knowledge tools were intentionally created to be child-friendly and accessible (e.g., comic strip, design recommendations illustrated using a playground map, alt-text navigation).

4

A Whole Family Approach to Play: From Sibling to Adult Play

The desire to have the whole family play together in the same community space was shared by many of the families of disabled children that were interviewed. Having community spaces that are intentionally designed to be accessible and inclusive was highlighted to be of value not only for disabled children and their peers, but also parents and grandparents who experience disability. Further research into these intergenerational play experiences is warranted to allow for creative ways to enhance play across the lifespan.

ACKNOWLEDGEMENTS

We would like to acknowledge all of our team members for their valuable and ongoing support on this project. We would not be here without you.

To our community partners - thank you for taking the time to help us with recruitment and reach families across Canada.

To the families who have participated in the various projects within the Play Finds a Way research project - your willingness to share your experiences allow us to conduct this research and work toward a more inclusive place for all children and youth, thank you.

Finally, we would like to thank the generous funding provided by the Canadian Tire Jumpstart Charities

Jumpstart Bon départ



THANK YOUR SUPPORT

KNOWLEDGE TRANSLATION OUTPUTS: REFERENCE LIST

Published Papers

- 1. James ME, Jianopoulos E, Ross T, Buliung R, <u>Arbour-Nicitopoulos KP</u>. (2022). Play behaviours and interactions among children on an inclusive playground setting. *International Journal of Environmental Research and Public Health*, 19, 13648. https://doi.org/10.3390/ijerph192013648
- 2. Taylor LG, Vanderloo LM, Arbour-Nicitopoulos KP, Leo J, Gilliland J, Tucker P. (2022). Playground inclusivity for children with a disability: A scoping review protocol. JMIR Research Protocols, 11(7),e:37312. http://dx.doi.org/10.2196/37312.
- 3. Brown D, Ross T, Leo J, Buliung R, Shirazipour C, Latimer-Cheung AE, <u>Arbour-Nicitopoulos KP</u>. (2021). A scoping review of evidence-informed recommendations for designing inclusive playgrounds. Frontiers of Rehabilitation Sciences, 2:664595. doi: 10.3389/fresc.2021.664595.
- 4. Shirazipour C, Luna B, Ross T, Leo J, Buliung R, Latimer-Cheung A, Arbour-Nicitopoulos KP. (in press). Understanding the experiences of parents of disabled and able-bodied children at playgrounds designed for disability inclusion. Disability and Society. doi:10.1080/09687599.2024.2313704

Papers Under Review / In Preparation

- 1. Odorico N, James M, Sottile A, Naqvi, Z, Millar C, Leo J, Latimer AE, Arbour-Nicitopoulos KP. Investigating strategies to foster quality participation on playgrounds for play programmers and parents of children with disabilities.
- 2. Millar C, Bihari A, Leo J, Buliung R, Ross T, Shirazipour C, Latimer-Cheung AE, Arbour-Nicitopoulos KP. Storying the inclusive playground experience of families of disabled and nondisabled children.
- 3. Odorico N, Papple L, Arbour-Nicitopoulos KP. Sliding into new therapy spaces: Exploring inclusive playgrounds in rehabilitation therapy.

Published Abstracts

1. Odorico N, James M, Sottile A, Millar C, Leo J, Latimer AE, Arbour-Nicitopoulos KP. (2022). Investigating strategies to foster quality participation on playgrounds for play programmers and parents of children with disabilities. Journal of Exercise, Movement and Sport, 53(1). https://www.scapps.org/jems/index.php/1/article/view/2924

Reports (Playground work showcased within)

- 1. Novae Res Urbis (NRU) Greater Toronto and Urban Area. Making Play Inclusive. Volume 25, No. 31. August, 2022.
- 2. Canadian City Parks. Inclusion: Accessibility Beyond Design. Inclusive playgrounds about more than the equipment, July, 2020. <u>Canadian City Parks Report</u>

Media

- 1. The Globe and Mail. *How to design the perfect city playground*. June 23rd, 2023. www.theglobeandmail.com/life/home-and-design/article-how-to-design-the-perfect-city-playground/
- 2. Accessible Media Inc (AMI). Creating inclusive playgrounds. August 24th, 2022. https://www.stitcher.com/show/now-with-dave-brown/episode/full-show-episode-619-206078219
- 3. UofT News. Inclusive play: U of T researcher studies the playground experiences of children with disabilities. August 12th, 2022. https://www.utoronto.ca/news/inclusive-play-u-t-researcher-studies-playground-experiences-children-disabilities
- 4. KPE Faculty News. Kelly Arbour leads study exploring playground experiences of children with disabilities. August 10th, 2022. https://kpe.utoronto.ca/faculty-news/kelly-arbour-nicitopoulos-leads-study-exploring-playground-experiences-children
- 5. CityNews Toronto. Making playgrounds inclusive. August 1st, 2022. https://toronto.citynews.ca/video/2022/08/02/making-playgrounds-inclusive/
- 6. Sport Information Research Centre. Enhancing sport and physical activity participation for Canadians with disabilities. July 25th, 2022. https://sirc.ca/blog/sport-participation-canadians-with-disabilities/
- 7. Outdoor Play Canada. Promoting Inclusive Play in Alberta: Inclusive Playground Programs. August 31st, 2021. https://www.outdoorplaycanada.ca/2021/08/31/promoting-inclusive-play-in-alberta-inclusive-playground-programs/
- 8. KPE Faculty News. The Play's the Thing: Creating More Inclusive Playgrounds. August 20th, 2021. https://kpe.utoronto.ca/faculty-news/plays-thing-creating-more-inclusive-playgrounds
- 9. Globe and Mail. Playgrounds can alieniate children with disabilities, July 7th, 2019. https://www.theglobeandmail.com/life/home-and-design/article-playgrounds-can-alienate-children-with-disabilities-now-theyre/?utm_source=Shared+Article+Sent+to+User&utm_medium=E-mail:+Newsletters+/+E-Blasts+/+etc.&utm_campaign=Shared+Web+Article+Links
- 10. CBC News. Charlottetown's accessible playground is a rare opportunity to improve, May 24th, 2019. https://www.cbc.ca/news/canada/prince-edward-island/pei-accessible-playground-research-1.5148216
- 11.U of T News. UofT researchers help charity build better, more inclusive playgrounds, April 17th, 2019. https://www.utoronto.ca/news/u-t-researchers-help-charity-build-better-more-inclusive-playgrounds

Conference Presentations

- 1. James ME, Odorico N, Capone A. (2023). Promoting accessible and inclusive outdoor play in early childhood education. Breath of Fresh Air conference, September 29th, 2023. Ottawa, Canada.
- 2. Odorico N, Papple L, Arbour-Nicitopoulos KP. (2023). Sliding into new therapy spaces: Exploring inclusive playgrounds in rehabilitation therapy. (Oral). International Play Association Triennial World Conference. June 9th, 2023. Glasgow, Scotland.
- 3. Taylor LG, Primucci M, Vanderloo LM, Arbour-Nicitopoulos KP, Leo J, Gilliland J, Tucker P. (2023). Evaluating existing playground structures for inclusivity to enable the participation of children with disabilities: A scoping review of tools. (Oral). International Play Association Triennial World Conference. June 8th, 2023. Glasgow, Scotland.
- 4. Luna B, Shirazipour C, Ross T, Leo J, Buliung R, Latimer-Cheung A, Arbour-Nicitopoulos KP. (2023). Building inclusion into play: Experiences of children with and without disabilities at inclusive playgrounds. (Poster). Society of Behavioral Medicine, April 26th 29th, 2023. Phoenix, AZ, U.S.A.

Conference Presentations cont'd

- 5. Odorico N, James M, Sottile A, Millar C, Leo J, Latimer AE, Arbour-Nicitopoulos KP. (2022). Investigating strategies to foster quality participation on playgrounds for play programmers and parents of children with disabilities. (Oral). Canadian Society for Psychomotor Learning and Sport Psychology Conference, October 14th, 2022, Montréal, Québec, Canada.
- 6. Arbour-Nicitopoulos KP, Moore S, Leo J. (2022). Prioritizing research and practice of outdoor play in children and youth with disabilities. North American Federation of Adapted Physical Activity, October 11th, 2022, St. Catharines, Ontario, Canada.
- 7. James ME, Ross T, Buliung R, Arbour-Nicitopoulos KP. (2022). Adaptation of the System for Observing Play and Recreation in Communities for measurement of play on inclusive playgrounds. (Oral). North American Federation of Adapted Physical Activity, October 11th, 2022, St. Catharines, Ontario, Canada.
- 8. Odorico N, Sottile A, James ME, Millar C, Leo J, Latimer-Cheung A, Arbour-Nicitopoulos K. (2022). Investigating strategies used to foster quality participation on playgrounds. (Oral). Eastern Canada Sports and Exercise Psychology Symposium, March 25-26, 2022. Online.
- 9. Sottile A, Odorico N, James M, Leo J, Millar, Latimer-Cheung A, Arbour-Nicitopoulos K. (2022). Investigating strategies used to foster quality participation on playgrounds. (Oral). Bertha Rosenstadt National Undergraduate Research Conference, April 1st, 2022, Toronto, Ontario, Canada.
- 10. Leo J, Millar C, Arbour-Nicitopoulos KP. (2022). Inclusive and accessible: Promoting inclusion and quality participation on the playground. PHE Canada National Conference, Online. January, 2022.
- 11. Arbour-Nicitopoulos KP & Leo J. (2021). Inclusive play design & planning. OneAbility Education Day. November 26th, 2021. Victoria, Canada. Online.
- 12. Leo J, Arbour-Nicitopoulos K, Millar C, James M. (2021). Building physical literacy through inclusive play: Examining playground spaces, design, and capacity for children experiencing disability. International Physical Literacy Association Conference, Online. October, 2021
- 13. Leo J, Arbour-Nicitopoulos K, Millar C, James M. (2021). Building community through inclusive play: Examining playground spaces, design, and capacity for children experiencing disability. Alberta Recreation and Parks Association Virtual Energize Conference, Presented Online. October, 2021.
- 14. Arbour-Nicitopoulos KP, Leo J, Millar C, James M. (2021). Inclusion on the playground: Examining spaces design, and capacity for children experiencing disability. International Society for Adapted Physical Activity. June 2021. Finland. Online.
- 15. Mahmood I, Ross T, Arbour-Nicitopoulos K, & R Buliung. (2020). Building an inclusive playground: Playground design + playground surroundings + communications + inclusive programming. (Poster presentation). Bloorview Research Institute Symposium, Nov. 17th, 2020. Toronto, ON, Canada.
- 16. Arbour-Nicitopoulos KP, Martin J. (2020). Accessibility and the built environment: Courts, playgrounds and sports fields. Recreation Facility Association of Nova Scotia. Halifax, Nova Scotia, Canada. October 15th, 2020. Online.
- 17. Leo J, Arbour-Nicitopoulos KP, Millar C. (2020). Promoting inclusive play in Alberta. Alberta Parks and Recreation Association Annual Conference. October 22nd, 2020. Online.
- 18. DiBuono M, Arbour-Nicitopoulos KP, Bobb J, Kasper K, Dignard. (2020). Canada's next generation of basketball stars Deconstructing the journey from playground to podium. Sport For Life Canadian Summit. January 30th, 2020. Gatineau, Québec, Canada.
- 19. Leo J, Arbour-Nicitopoulos KP, Costas C, Di Buono M, Cowie H. (2019). Promoting inclusive play in Alberta. Alberta Parks and Recreation Association Annual conference. October 24th, 2019. Calgary, Alberta.

Other Community Talks/Workshops

- 1. Arbour-Nicitopoulos KP. (2023). Supporting quality physical activity in communities for children and youth with disabilities. Luke's Legacy Research Rounds. CanChild, McMaster University. September 27th, 2023. Online.
- 2. Arbour-Nicitopoulos, K. P., Odorico, N., James, M. E., De Luca, L. (2023). Strategies to support quality participation in play among children with disabilities: Training session. Inclusive Communities Canada (ICCAN), Faculty of Kinesiology and Physical Education, University of Toronto, Toronto, Ontario, Canada.
- 3. Arbour-Nicitopoulos, K. P., Odorico, N., James, M. E., De Luca, L. (2023). Strategies to support quality participation in play among children with disabilities: Training session. City of Toronto, Toronto, Ontario, Canada.
- 4. Arbour-Nicitopoulos KP. (2023). Supporting quality physical activity in communities for children with disabilities. Colloquium Committee Seminar Series. Faculty of Social Sciences, Brock University. March 30th, 2023. St. Catharines, Ontario, Canada.
- 5. Arbour-Nicitopoulos KP. (2023). Supporting quality physical activity in communities for children with disabilities. Graduate Seminar. Nipissing University. March 9th, 2023. Online.

Knowledge Products

- 1. Odorico N, Naqvi Z, James M, Millar C, Leo J, Latimer-Cheung AE, Arbour-Nicitopoulos KP. (2024). Canadian Disability Participation Project. Blueprint for building quality participation on playgrounds for children with disabilities: Caregiver version. Available at: https://cdpp.ca/resources-and-publications/inclusive-playgrounds-resource
- 2. Odorico N, Naqvi Z, James M, Millar C, Leo J, Latimer-Cheung AE, Arbour-Nicitopoulos KP. (2023). Canadian Disability Participation Project. Blueprint for building quality participation on playgrounds for children with disabilities:

 Programmer version. Available at: https://cdpp.ca/resources-and-publications/inclusive-playgrounds-resource
- 3. Leo J, Arbour-Nicitopoulos KP, Millar C, James M, Sharma R, Boyd K. (2022). Inclusive Play Leadership Certificate. Part of the Canadian Tire jumpstart Charities' Coaching Kids of All Abilities resource. Available at: www.coachingallabilities.com/jumpstart/course/program.jsp
- 4. Ross T, Arbour-Nicitopoulos KP, Kanics I, Leo J. (July 2022). Guide de terrains de jeu inclusifs. Holland Bloorview Kids Rehabilitation Centre. Available at: www.hollandbloorview.ca/playgroundsplaybook
- 5. Ross T, Arbour-Nicitopoulos KP, Kanics I, Leo J. (July 2022). Creating Inclusive Playgrounds: A playbook of considerations and strategies. Holland Bloorview Kids Rehabilitation Centre. Available at: www.hollandbloorview.ca/playgroundsplaybook
- 6. Arbour-Nicitopoulos KP, Flood S. (July 2021). Inclusive playgrounds resource. Available at: https://cdpp.ca/resources-and-publications/inclusive-playgrounds-resource

Inclusive Playground Projects Based on Additional or Other Funding Sources:

- 1. Latimer-Cheung, AE (PI), Arbour-Nicitopoulos K, Leo J, Shirazipour C, Ross T included as co-Is and Canadian Tire Jumpstart as one of 50 community partners. Canadian Disability Participation Project 2.0: Developing, implementing and evaluating quality sport, exercise and play experiences for Canadians with disabilities. Social Sciences and Humanities Research Council of Canada (SSHRC), Partnership Grant. May 2023 to April 2030. (\$2,500,000). Note that Arbour-Nicitopoulos and Leo are the co-Chair leads of the Play Team for this 7-year grant.
- 2. Arbour-Nicitopoulos KP, Bassett-Gunter RL, Bremer E, Kingsnorth S, Latimer-Cheung AE, Leo J, Shikako-Thomas K, Perreira P. Applying a family-centred research approach to developing and testing physical activity interventions in children and youth with disabilities. SSHRC, Insight Grant. May 2023 to April 2026. (\$198,032).
- 3. Arbour-Nicitopoulos KP, Bassett-Gunter RL, Bremer E, Kingsnorth S, Latimer-Cheung AE, Leo J, Shikako-Thomas K, Perreira P. Applying a family-centred research approach to developing and testing physical activity interventions in children and youth with disabilities. SSHRC, Sport Participation Research Initiative (SPRI) supplement. January 2024 to April 2026. (\$20,000).