

JANUARY 2018



Canadian Disability Participation Project

The CDPP is an alliance of university, public, private and government sector partners working together to enhance community participation among Canadians with physical disabilities. The research team for this project has expertise in physical activity, disability, and psychology.



Sport & Exercise Participation and Disability: A Blueprint for Change

Making sense of the factors that influence sport and exercise participation for people with physical disabilities

Physical activity is critical for all people, including people with physical disabilities. But the reality is that people with physical disabilities, regardless of age, just don't get enough physical activity.

In 2016, in order to understand the critical factors that help or hinder people with physical disabilities from participating in sport and exercise, the Canadian Disability Participation Project (CDPP) conducted a systematic review of previous research efforts in this area¹. The specific goals of the review, which was led by Dr. Kathleen Martin Ginis, were to identify all factors that influence sport and exercise participation levels of people with physical disabilities (children and adults), and then present them in a way that provides a **blueprint** for researchers and practitioners to work together in order to develop and deliver strategies designed to increase those participation levels.

What is the extent of the problem?

Excellent research has clearly demonstrated that the vast majority of people living with physical disabilities do not participate in sufficient sport and exercise to achieve health benefits².

Other studies illustrate that, when people with disabilities do try to become physically active, their attempts are often thwarted, as evidenced by high dropout rates among those trying to initiate or maintain an active lifestyle³.

This combination of low sport and exercise participation rates and high dropout rates suggests that people with disabilities face tremendous barriers to becoming and staying physically active.

What can be done to improve sport and exercise participation?

As researchers focusing in this field, it was clear to us that we must continue to identify the factors that help or hinder participation. But it was also clear that we had to do more than simply compile and publish lists of these factors, in the hope that someone would find them useful.

What we confirmed in the course of completing our review is that there has been little effort to compile and present existing sport and exercise-enhancing information in a manner that is immediately accessible and useful to the broad cross-section of people who are responsible for sport and exercise promotion among people with physical disabilities—people working at all levels of the health care and recreation sectors.

Finding solutions begins with understanding the key factors

One of the first steps of our systematic review was identifying 22 review articles that identified both barriers and facilitators to sport and exercise participation in children and adults with physical disabilities. From these articles, we then extracted 208 factors related to sport and exercise participation. Next, we systematically organized the most important factors within the framework of a widely accepted social ecological model, which we'll explain in a moment.

In completing this, we had two main goals. The first was to clearly show, preferably at a glance, what factors are influenced directly by people working in the health care and recreation sectors (these sectors have the most influence, but not all—for example, transportation greatly affects a person's ability to participate in sport and exercise, but is not directly influenced by the health care and recreation sectors). The second was to draw attention to the factors that are relevant across both sectors, since identification of areas of overlap might indicate high priority targets for intervention and could stimulate much-needed cross-sector dialogue and collaboration⁴.



Factors that influence sport and exercise participation: A social ecological model

We chose to present our results with a social ecological model of health promotion. The model is a graphic representation with five bands of influence. At the core of the model is the individual. The core is surrounded by four bands of influence representing the interpersonal, organizational, community, and policy levels, with the activities and actions of each affecting the individual.

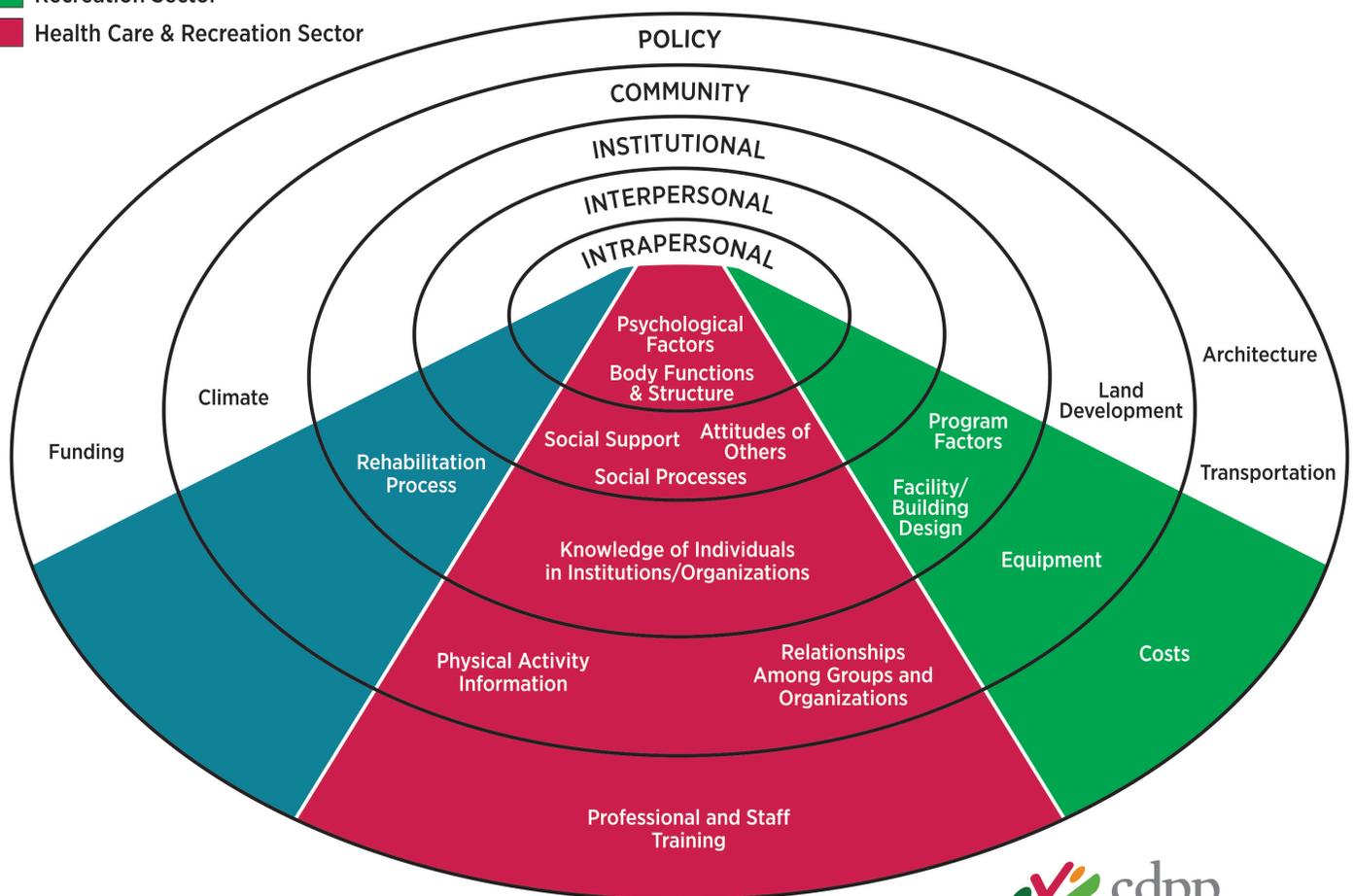
- The core level represents **intrapersonal** level factors that can influence sport and exercise. These influences include psychological factors such as attitudes toward sport and exercise, physical factors such as the person's degree of physical functioning, as well as a person's employment status.
- The second band contains factors of influence at the **interpersonal** level, which can influence sport and exercise via social and cultural pressures. Friends, family, health care providers, and community recreation workers are among those who are potential sources of interpersonal messages and support in this band.
- The third band represents influencing factors at the **institutional** level—in health care systems, employers or worksites, health care plans, local recreation departments, professional organizations

and others. These factors can encourage or discourage sport and exercise participation through organizational changes in systems and policies that affect both the physical and social environment.

- The fourth band represents factors that exist at the **community** level. These factors include informational and equipment resources. Two factors related to the physical environment—the climate and the development and accessibility of community areas—are also captured in this band.
- The fifth and outermost band represents factors at the **policy** level. These factors involve developing new policies, and improving and fully implementing existing policy. Federal, provincial, and local government agencies may support policies that promote healthy behaviour.

The coloured areas within the model represent the scope of influence for the two main sectors involved in influencing sport and exercise levels for people with disabilities—the health care sector (blue), and the recreation sector (green). The red area represents the combined scope of influence for both sectors. As you can see, the large majority of the factors we identified fall within this combined area of influence. As such, they represent excellent opportunities for both sectors to dialogue and work together in pursuit of a common goal: increasing sport and exercise participation for people with physical disabilities.

-  Health Care Sector
-  Recreation Sector
-  Health Care & Recreation Sector



Where do we go from here?

Based on our review (which includes identification of all factors that could influence sport and exercise levels for people with physical disabilities and determining which sector is involved for each), our team arrived at a number of recommendations and priorities to move forward with.

1. Researchers and practitioners in the health-care and recreation sectors must **establish inter-professional communication channels** and work collaboratively to address barriers impeding sport and exercise participation among people with physical disabilities.
2. Researchers must shift their focus from describing sport and exercise barriers and facilitators, to **working collaboratively with practitioners** to develop, test, and deliver strategies to increase sport and exercise participation among persons with physical disabilities.
3. **Strategies should not focus only on people with disabilities** (those at the core of the model, at the intrapersonal level) but should target each level in the model and the key stakeholders operating within those levels—including peers, coaches, rehabilitation specialists, and programme administrators.
 - **At the intrapersonal level**, intervention development should focus on improving negative emotions, attitudes, and self-perceptions, and teaching behaviour change strategies.
 - **At the interpersonal, institutional, and community levels**, intervention development must focus on improving societal attitudes toward sport and exercise for people with disabilities, enhancing practitioner knowledge, and building social networks to provide the informational and other sport and exercise supports required by people with disabilities.
 - **At the institutional, community, and policy levels**, interventions and organizational and public policies are needed to circumvent and alleviate transportation and financial cost barriers.

Summary

Our review project identified key factors for sport and exercise participation among individuals with a physical disability and presented it in an accessible way via a social ecological model. We urge researchers and practitioners in the recreation and health-care sectors to use our synthesis and recommendations as a blueprint and a catalyst for positive change in sport and exercise promotion efforts for persons with physical disabilities.

References

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This work was supported by a Partnership Grant from the Social Sciences and Humanities Research Council of Canada (grant number 895-2013-1021) for the Canadian Disability Participation Project (www.cdpp.ca).