

Frame Running, inclusive physical activity participation for health and performance

Instructional course

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Juliëtte van Brouwershaven, Frame Running athlete



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Course programme

- Introduction to Frame Running
- Frame Running in Europe
- Frame Running competition
- Research
- Talk with Juliëtte, an athlete
- Try out yourself
- Discussion and Questions



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What is Frame Running?

- Para-athletic event
- For persons with moderate-to-severe walking limitations, balance problems
- Frame can also be used in therapy or for an active life style (home situation)



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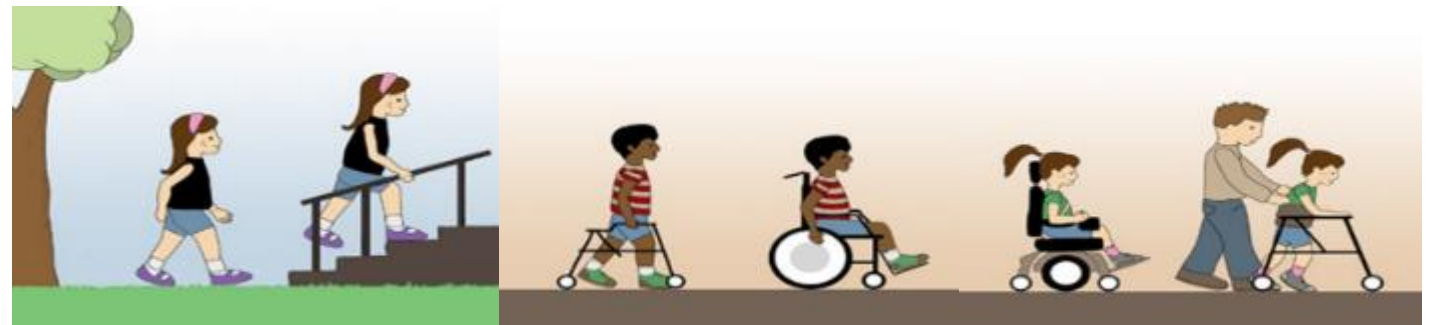


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For whom?

Children and adolescents with:

- Cerebral palsy: GMFCS II, III and IV (V)
- Spina Bifida
- Neuromuscular diseases
- Traumatic brain injury
- Incomplete spinal cord injury
- Syndromes
- Amputation
-



Physiotherapy (GMFCS V)

<https://www.facebook.com/996391487049950/videos/2197710517149237/>



**OMG, this is so nice*



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Active lifestyle



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Active lifestyle and play



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Tips for implementation



What did we do?

- Clinics in special schools
- Clinics in rehabilitation centers
- Clinics at athletic clubs
- Clinics at sports days
- Workshops during congresses and meetings
- Articles in local newspapers
- Website, Facebook, newsletters
-



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Education and inspiration

- Basic course for trainers (with Athletic Federation)
- Advanced course for trainers
- Workshops at 'Athletics Day' and 'Day for running trainers'
- Yearly 'Inspiration day'
- Inclusion of framerunners in regular running events
- Instructional material for trainers and health professionals

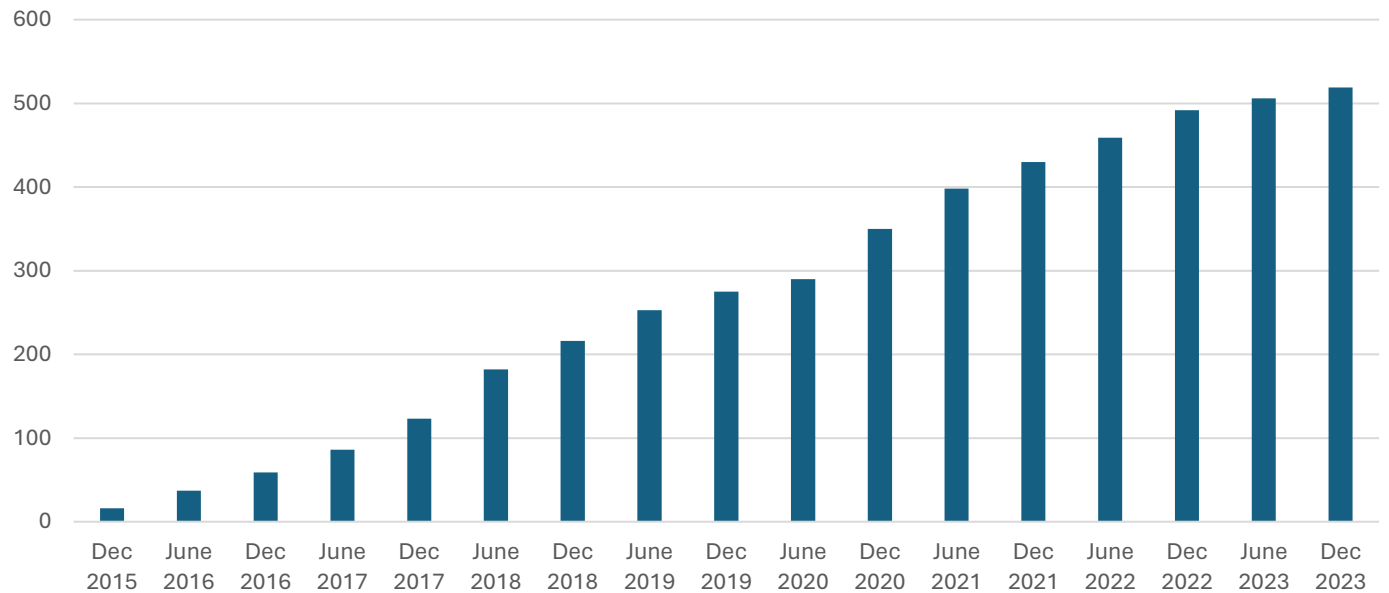


Frame Running in the Netherlands



>50 athletic clubs

Total number of Frame Running athletes at regular athletic groups in the Netherlands



>500 Frame Running athletes (183 adults)



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Regional competition and yearly Dutch Cup



Material: lending pool and experience center



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All weather fun!



Where?



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- <https://framerunning.org/>
- <https://by-conniehansen.com/contact/dealers/>

Also:

Norway : <https://www.facebook.com/FrameRunningNo/>

Classified Frame Running Athletes in : Italy, France, Greece, Spain and Ecuador

Starting up: South-Africa, Thailand, Japan and New-Zealand

Please contact us and we can put you in contact



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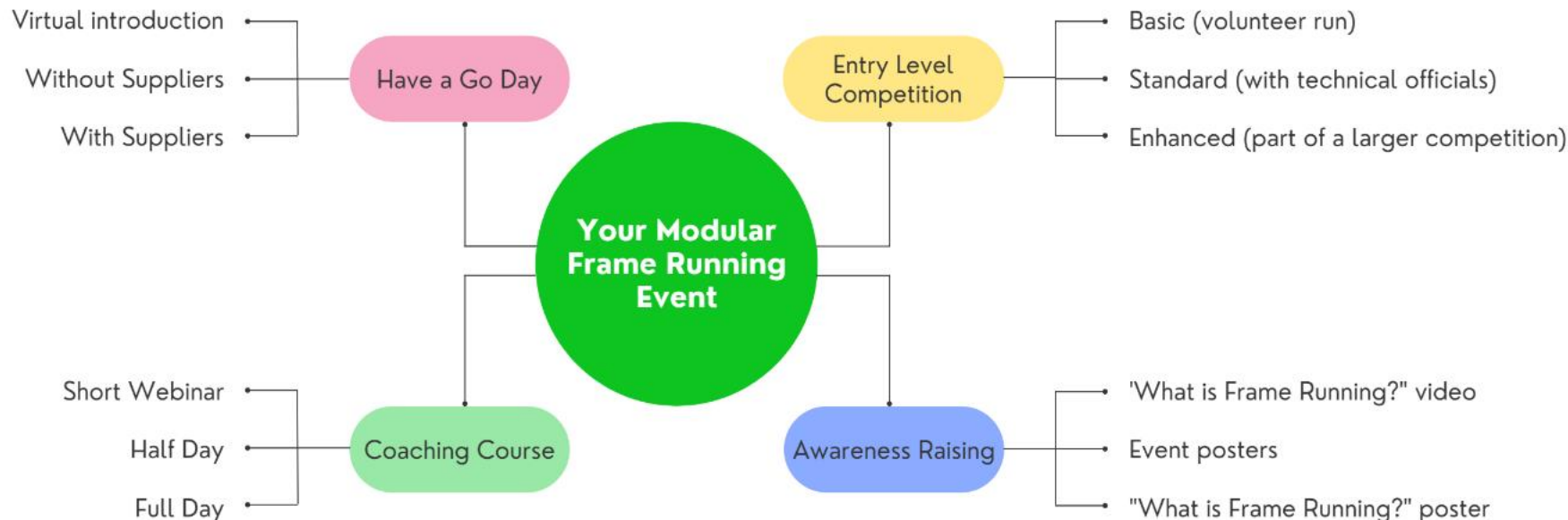
Examples Frame manufacturers

- By Connie Hansen
- RAD
- WISP
- Big, little & Strong emperor
- Wolturnus road runner
- Compact runner
- Pernova
- 'home-made'
- More to come..





Build Your Own RUNFREE Event



- 1 Choose if you want to hold a stand-alone event or combine aspects to build a bigger event
- 2 Choose the option under each aspect that suits you best
- 3 Combine together with another option from a different stream, or hold as a stand-alone event

- 4 Use the materials available to help you plan and run your event
- 5 Add in material from the Awareness Raising stream to increase awareness of your event and of Frame Running in general



Competition

- Club & regional competitions
- International:
 - Since 1997: Camp & Cup in Denmark
 - Since 2017: World Para Athletics event
- Para Sport classification: T71 and T72



Frame Running in the UK

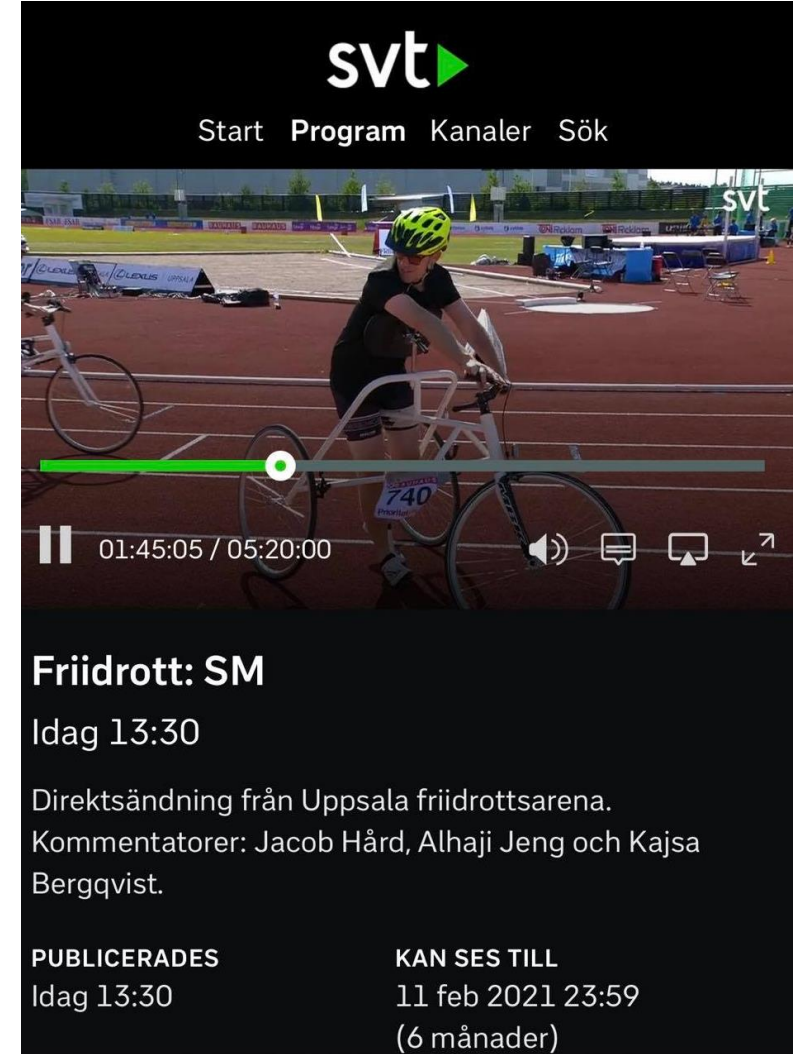


- Scotland:
 - Since 2004
 - Frame Running Scotland (<https://www.frscotland.org/>)
 - Scottish athletics, Scottish Disability Sport
 - Frame Running equipment hub in Glasgow
 - 12 groups (athletic clubs)
- England/ Wales: CP Sport (<https://cpsport.org/frame-running/>)
- UK wide: Special Schools
Park Runs, road races, Great North Run, London Marathon



Frame Running in Sweden

- 2014-2016 project "Frame Running Sweden"
- ~ 25 sports clubs
- Since 2017 - official discipline at the Swedish Para Athletics Championships
- 2023 Thesis "Frame Running enabling health improvements through physical exercise in cerebral palsy"



svt
Start Program Kanaler Sök

svt

01:45:05 / 05:20:00

Friidrott: SM
Idag 13:30

Direktsändning från Uppsala friidrottsarena.
Kommentatorer: Jacob Hård, Alhaji Jeng och Kajsa Bergqvist.

PUBLICERADES
Idag 13:30

KAN SES TILL
11 feb 2021 23:59
(6 månader)



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Frame Running Research



("Frame Running") OR ("RaceRunning") OR ("Race Running") OR (RaceRui

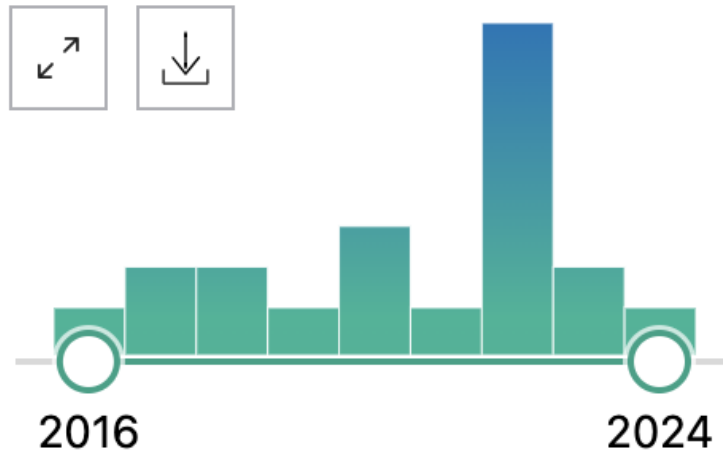


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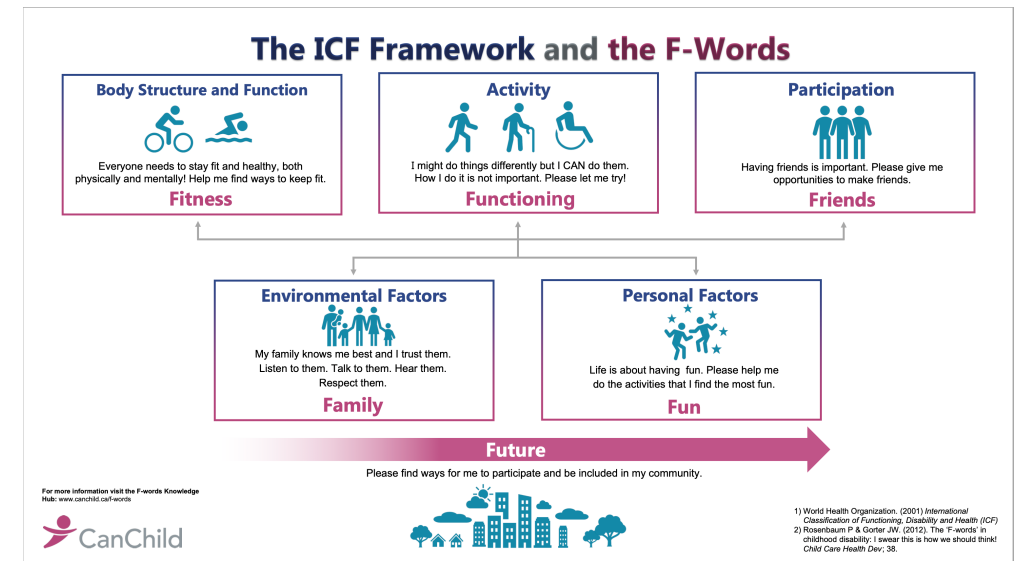
RESULTS BY YEAR



Pubmed ~ 16 results

Overview

- Domains in ICF/F-words?
- Where?
- Who (study population)?
- Study designs?



Overview

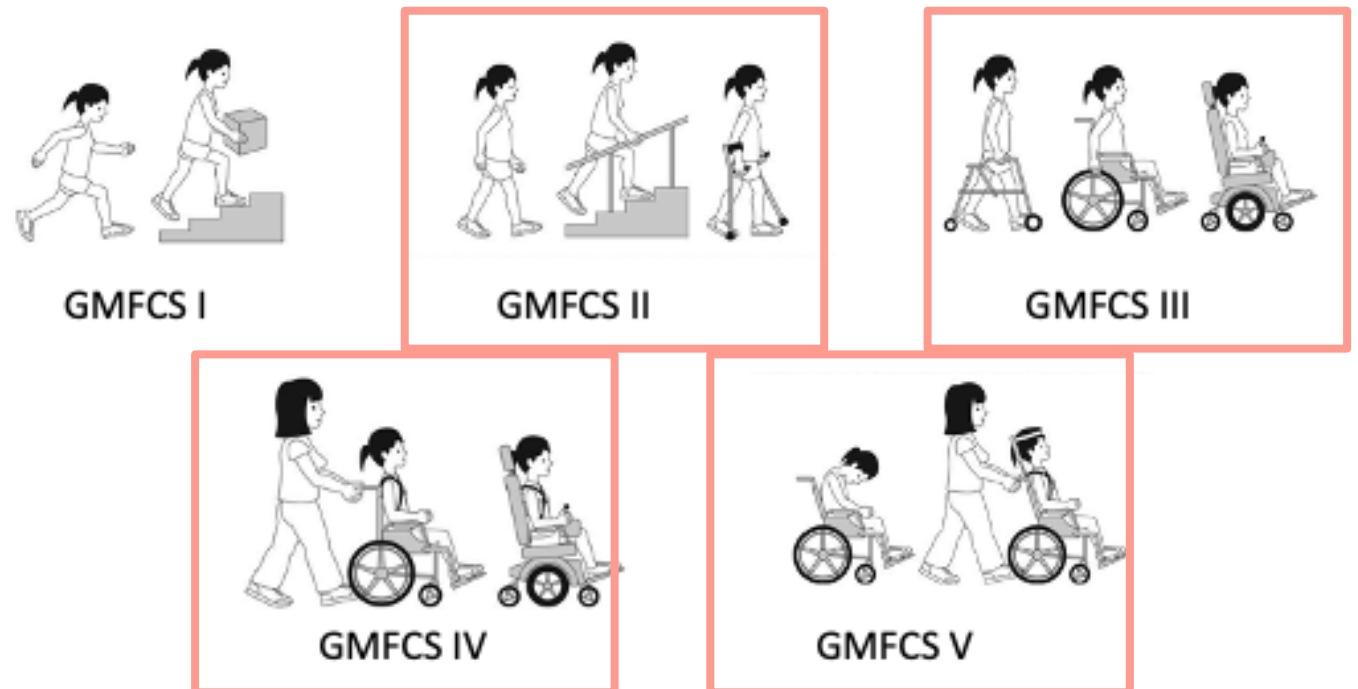
- Domains in ICF/F-words?
- **Where?**
- Who (study population)?
- Study designs?



Overview

- Domains in ICF/F-words?
- Where?
- **Who (study population)?**
- Study designs?

Cerebral Palsy, GMFCS = Gross Motor Function Classification System



Illustrations Version 2 © Bill Reid, Kate Willoughby, Adrienne Harvey and Kerr Graham, The Royal Children's Hospital Melbourne ERC151050

GMFCS descriptors: Palisano et al. (1997) Dev Med Child Neurol 39:214-23
CanChild: www.canchild.ca

Overview

- Domains in ICF/F-words?
- Where?
- Who (study population)?
- **Study designs?**



• **Observational/Cross-sectional**



- Classification



- Survey & interviews

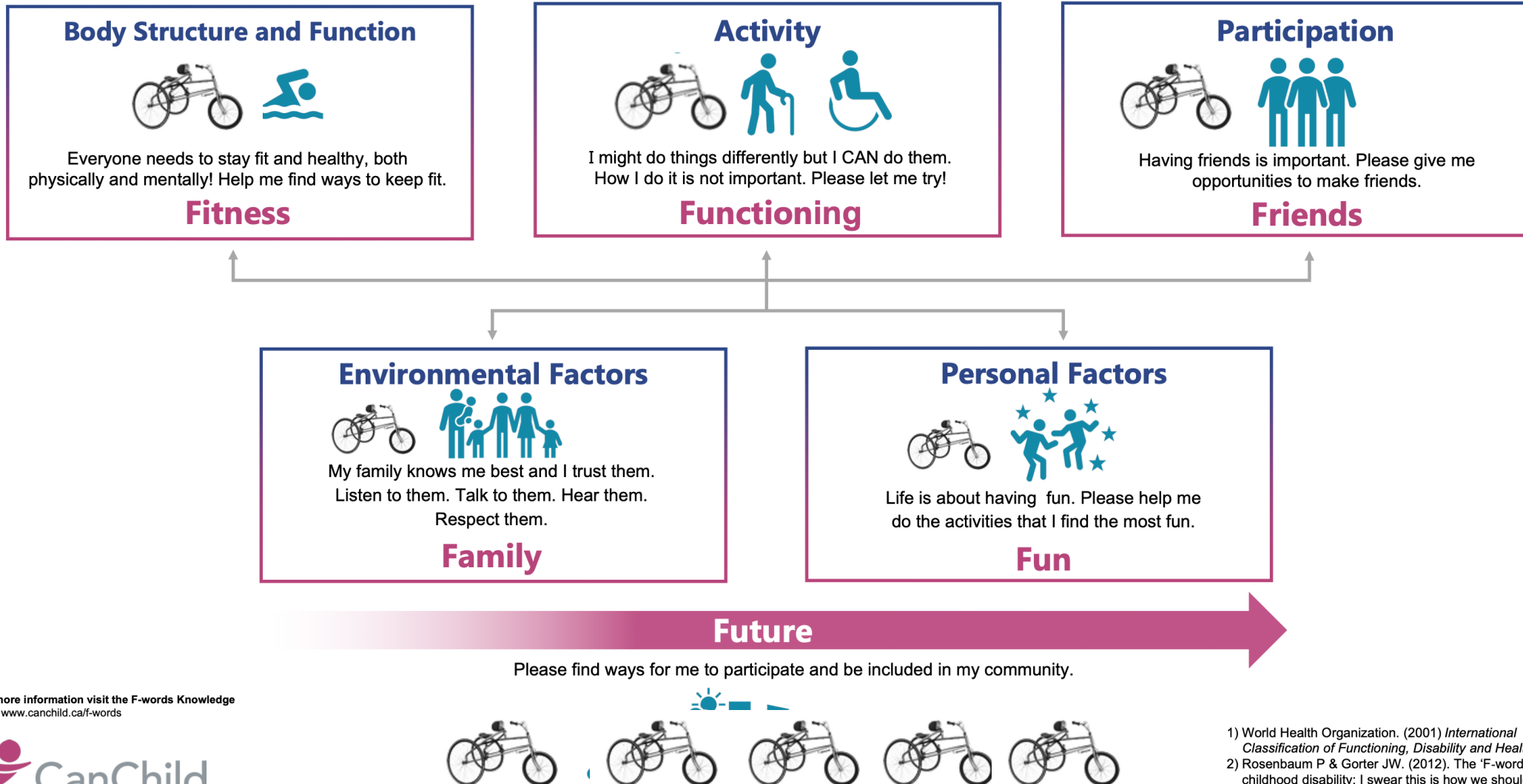


- Acute effects

• **Experimental/intervention**



The ICF Framework and the F-Words



For more information visit the F-words Knowledge Hub: www.canchild.ca/f-words



1) World Health Organization. (2001) *International Classification of Functioning, Disability and Health (ICF)*
 2) Rosenbaum P & Gorter JW. (2012). The 'F-words' in childhood disability: I swear this is how we should think! *Child Care Health Dev*; 38.

Body Structure and Function



Everyone needs to stay fit and healthy, both physically and mentally! Help me find ways to keep fit.

Fitness



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Body Structure and Function



Everyone needs to stay fit and healthy, both physically and mentally! Help me find ways to keep fit.

Fitness

→ significant benefits in enhancing physiological functions and overall health in individuals with cerebral palsy

FOCUS

1. Biological effects of physical activity (blood borne biomarkers): immune function [17] and extracellular vesicles (EVs): i.e., particles carrying microRNAs [14]
2. Physiological response and exercise testing [2, 6, 9]
3. Frame Running endurance (6-MFRT) [6]/ Cardiorespiratory fitness [6, unpublished data]
4. Muscle Function [6, 14]
5. Protocols for intervention studies [7, 10]
 - Functional Mobility
 - Muscle strength

CONCLUSIONS:

→ MVPA is effective, but biology and response in CP may differ from typically developed peers

→ Frame Running = MVPA

→ Using the running frame for testing cardiorespiratory fitness works! ✓

→ ↑ after 12wks FR training

→ ↑ Muscle thickness

→ Currently underway/under review



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Activity



I might do things differently but I CAN do them.
How I do it is not important. Please let me try!

Functioning



Frame Running
training



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Activity



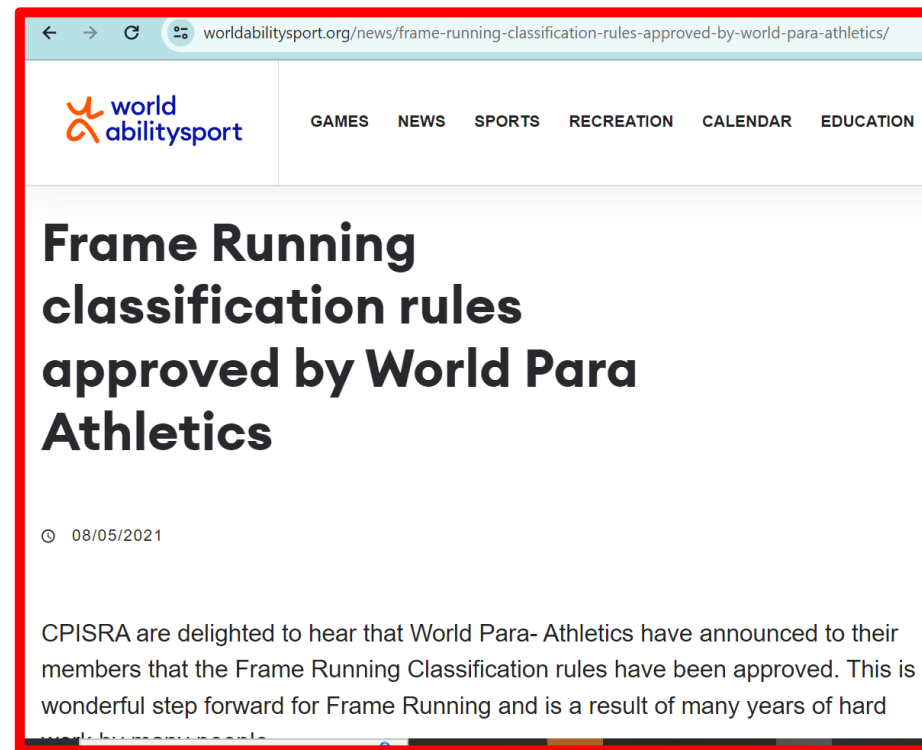
I might do things differently but I CAN do them.
How I do it is not important. Please let me try!

Functioning

FOCUS

1. Parasport Classification [4, 8]
2. Factors associated with Frame Running Capacity [4, 8, 16]
3. Frame Running endurance /capacity [6, 16]
4. Functional mobility & fitness [12, 13]
5. Currently underway/under review [7, 10] (protocols):
 - Self-reported performance of activities of daily living
 - Functional Mobility Scale
 - Daily step count

RESULT



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Participation



Having friends is important. Please give me opportunities to make friends.

Friends

Personal Factors



Life is about having fun. Please help me do the activities that I find the most fun.

Fun

Environmental Factors



My family knows me best and I trust them. Listen to them. Talk to them. Hear them. Respect them.

Family

Perceived Impact of Frame Running on:

- Quality of Life ↑ [12, 13]
- Psychosocial outcomes (confidence, making friends etc) ↑ [12, 13]
- Fun ↑ [12, 13]



References (order by year, **bold colored** reference is research from the teams of presenters of this “Frame Running instructional course EACD 2024”)

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Thank you!



31st EACD Meeting, Paris, May 23-25, 2019 (Archive)

 www.eacd2019.org	Innovation for participation	EACD
	Paris, France SAVE THE DATES	2019
Conference	23 rd -25 th May 2019	Dead Line of the call for abstracts
		31 st October 2018
European Academy of Childhood Disability		



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Interview with Juliëtte



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Thank you for your attention!

Any questions?



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If you would like to have a copy of the slides and/or would like to be kept updated with Frame Running (research) developments, please leave your contact details.

