

Important factors for «tailoring» a tricycle

Implications for cycling satisfaction



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Objective

1. Investigate which factors that can help therapists and people with disabilities to choose the most appropriate tricycle
2. Investigate whether a tailor-made tricycle affects satisfaction in cycling activity



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Methods

- Biomechanical tests
 - 6 Minutes Walk Test
 - 30 Seconds Sit-To-Stand-Test
 - The Trunk Impairment Scale
 - The Oxford Scale of muscle strength
 - Range of Motion Tests
- Technological measurement
 - Watt when pedalling

Open-ended question in an online questionnaire about important factors for choice of tricycle.



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How satisfied are you about the way you cycle now?



1	2	3	4	5
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Not satisfied at all

Extremely satisfied

Participants

Category	Included (n = 50)	
	n	%
Age		
5–10	12	24
11–18	10	20
19–30	8	16
31–50	8	16
51–80	12	24
Gender		
Female	27	54
Male	23	46
Place of residence		
City	23	46
Rural	27	54
Diagnosis		
Neuromuscular diseases	19	38
Cerebral palsy	13	26
Intellectual disability	9	18
Others	9	18
Application		
Healthsports Centres	30	60
Local therapists	20	40

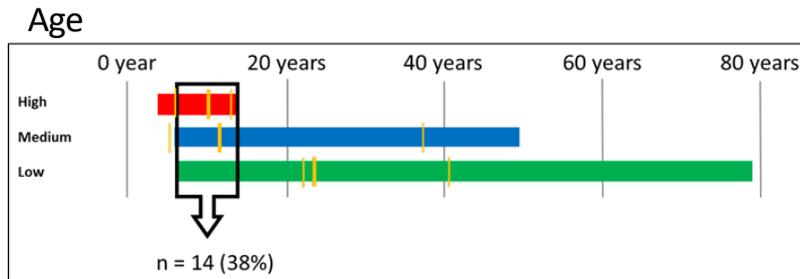


Results



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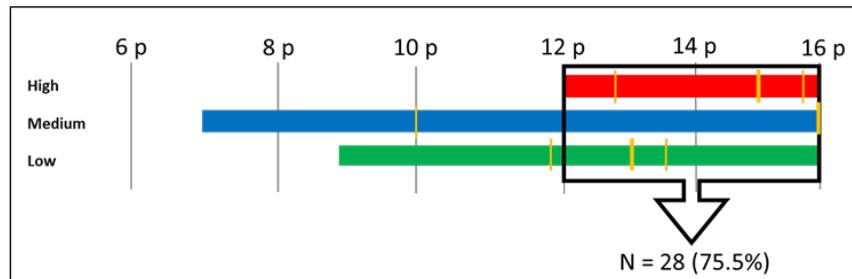
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Watt when pedalling

	Applied <i>highest watt</i>	Applied <i>lowest watt</i>
n	21	14
Mean	52.48	21.14
Std. Deviation	51.31	20.89
Minimum	2	2
Maximum	155	80

Trunk Impairment Scale



Results



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Safety

User-
friendly

Mastery

Cool

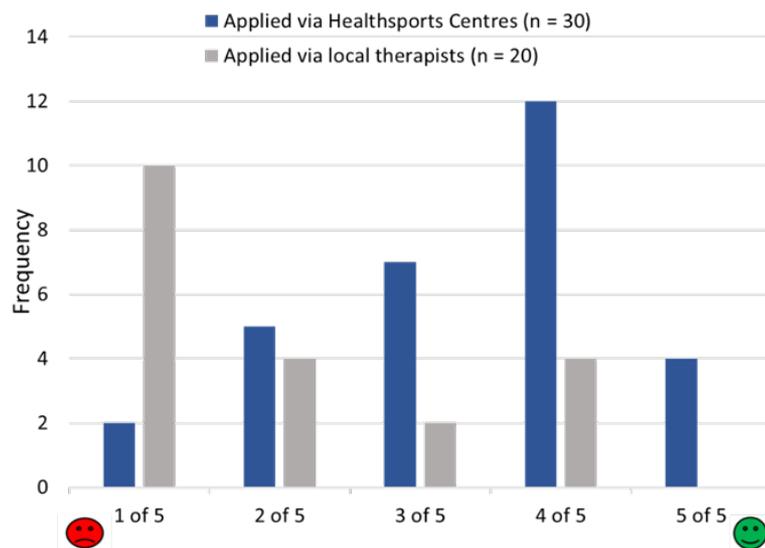
Comfort

Assistive
motor

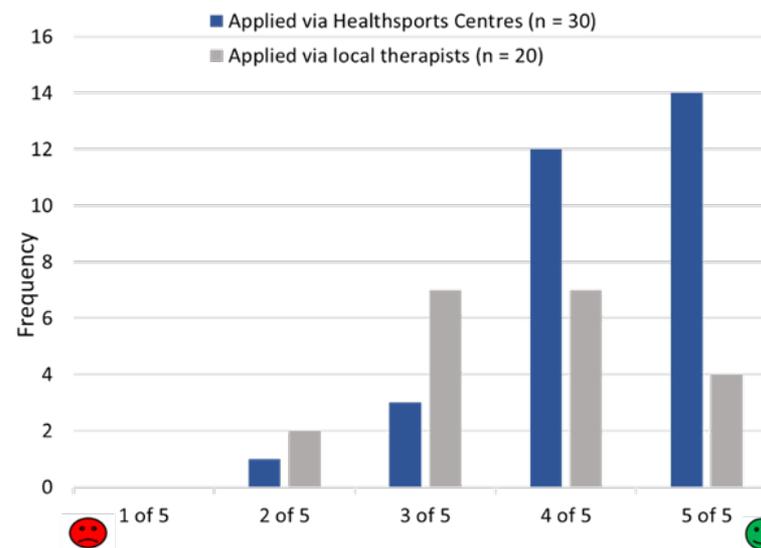
Results



Satisfaction pre-test



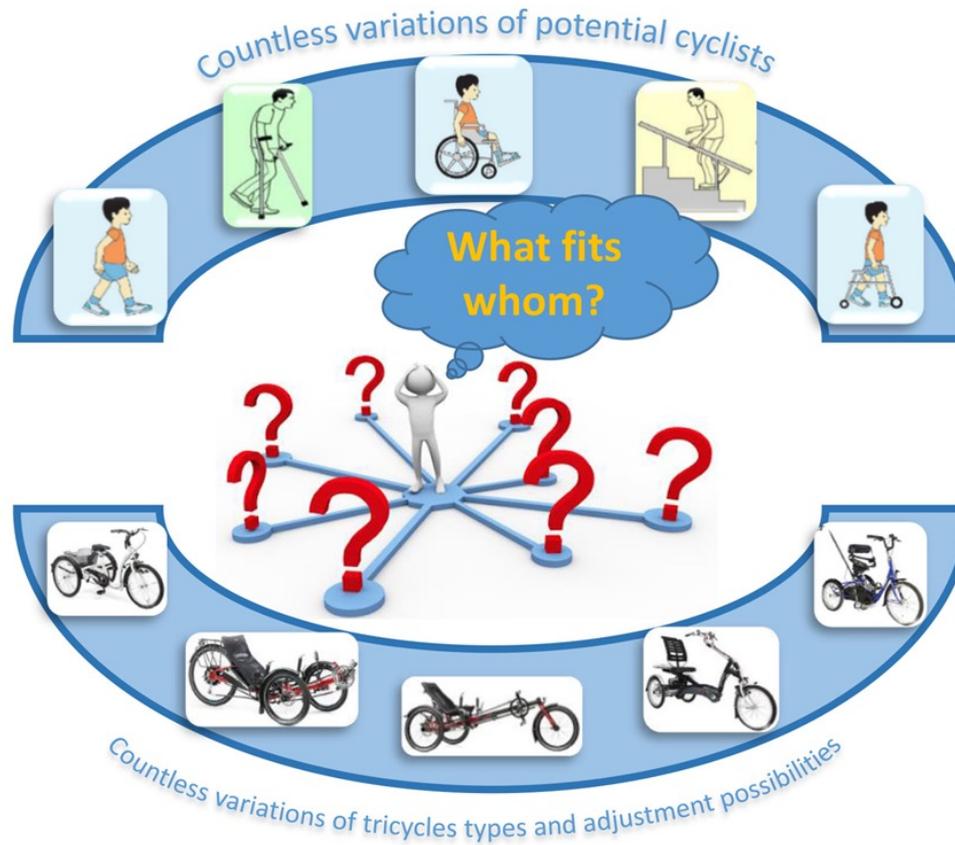
Satisfaction post-test





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Read more?

What fits me? Procurement of adapted tricycle for activity and participation

Disability and Rehabilitation: Assistive Technology, 2021:1-9

Acquiring a tailor-made tricycle – implications for people with disabilities.

Technology and Disability, vol. 34, no. 1, pp. 35-44, 2022

Exploring physical activity level after procurement of adapted tricycle; Quantity versus enjoyment.

Soon in European Journal of Adapted Physical Activity

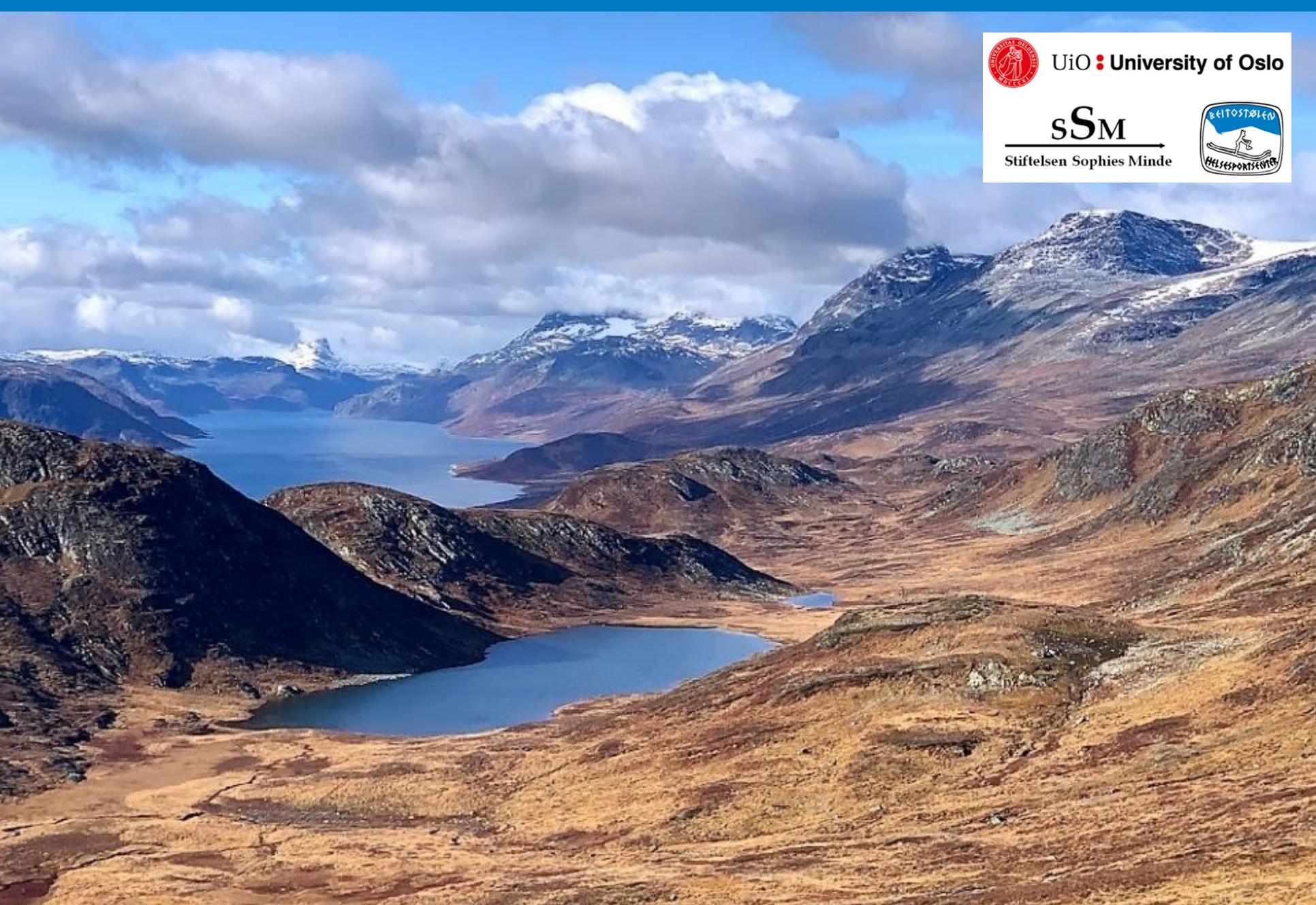


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