



Wednesday 25th of September 2024

4:00 PM- 4:10 PM

Evidence-based framework to optimize active upper limb motor training in subacute cervical spinal cord injury

SPEAKER'S DISCLOSURE

I declare to have no interests in the below:

- The existence of any significant financial activity or other relationship
- Financial or material compensation in relation to research and publishing
- Financial or material compensation in relation to educational activities
- Ownerships and possessions in companies related to health care (includes service providers, IT)
- Compensation for expert functions in health care and consulting health care guidance processes



Evidence-based framework to optimize active upper limb motor training in subacute cervical spinal cord injury

ISCoS

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Under supervision of Prof. Annemie Spooren



UHASSELT

KNOWLEDGE IN ACTION

Introduction

Active motor training



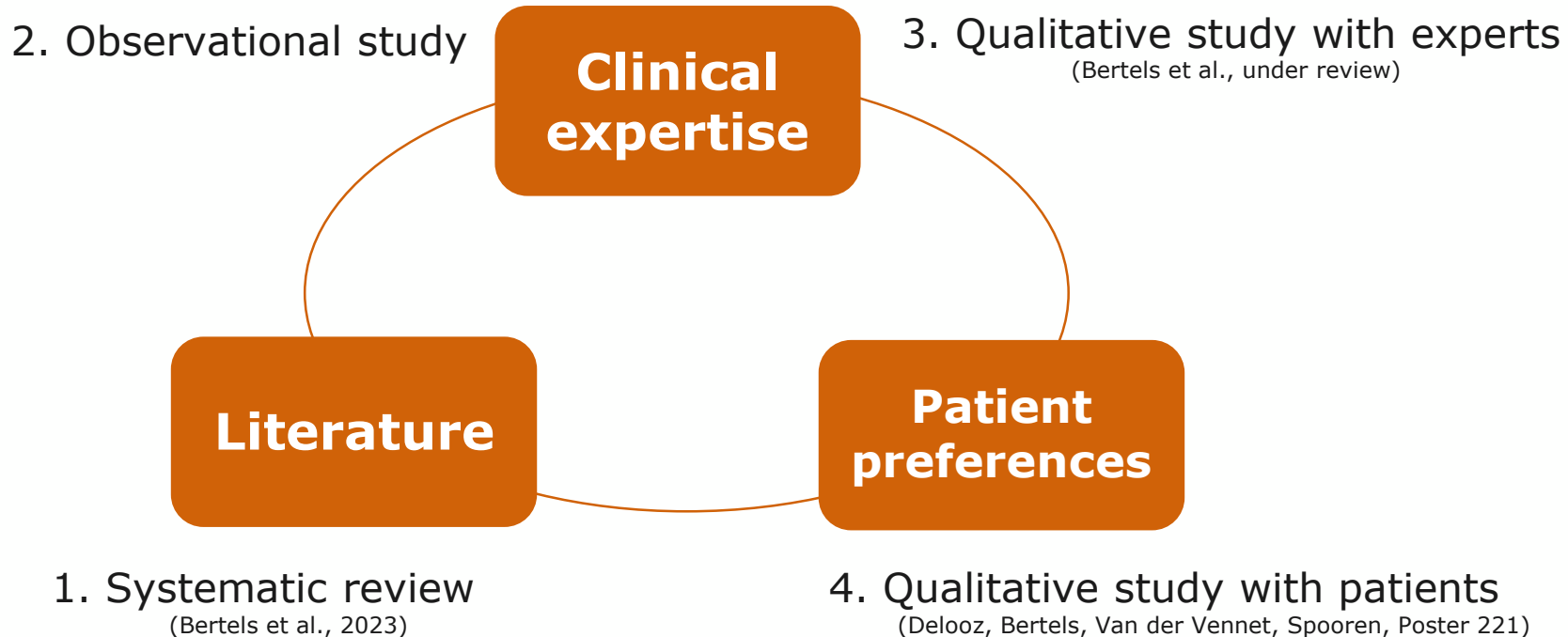
Enhancing upper limb function
In people with cervical spinal cord injury
(pwC-SCI)

To develop a conceptual framework for pwC-SCI in subacute rehabilitation phase

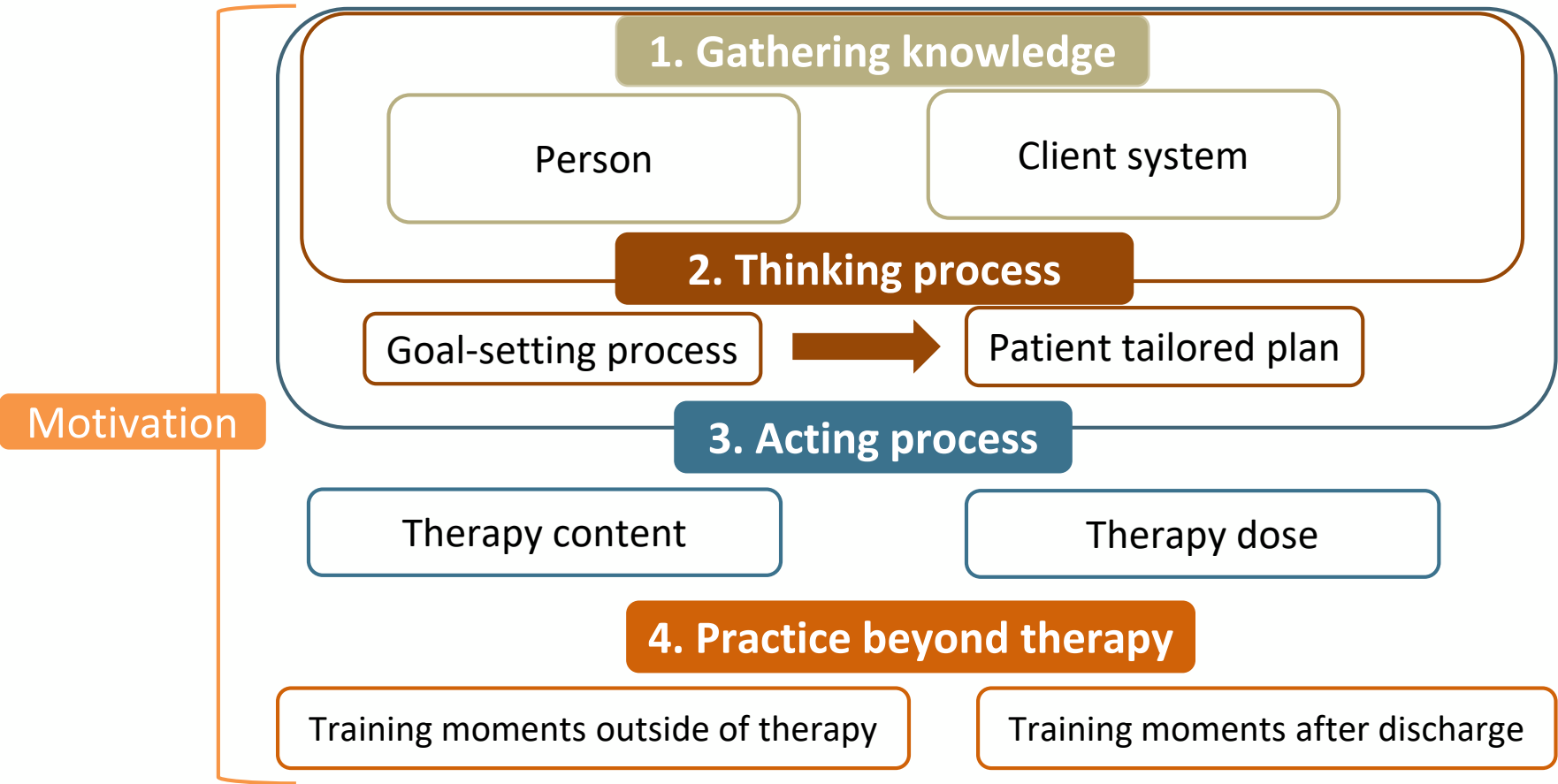
- to enhance upper limb function at the ICF activity level
- to integrate skills into daily life

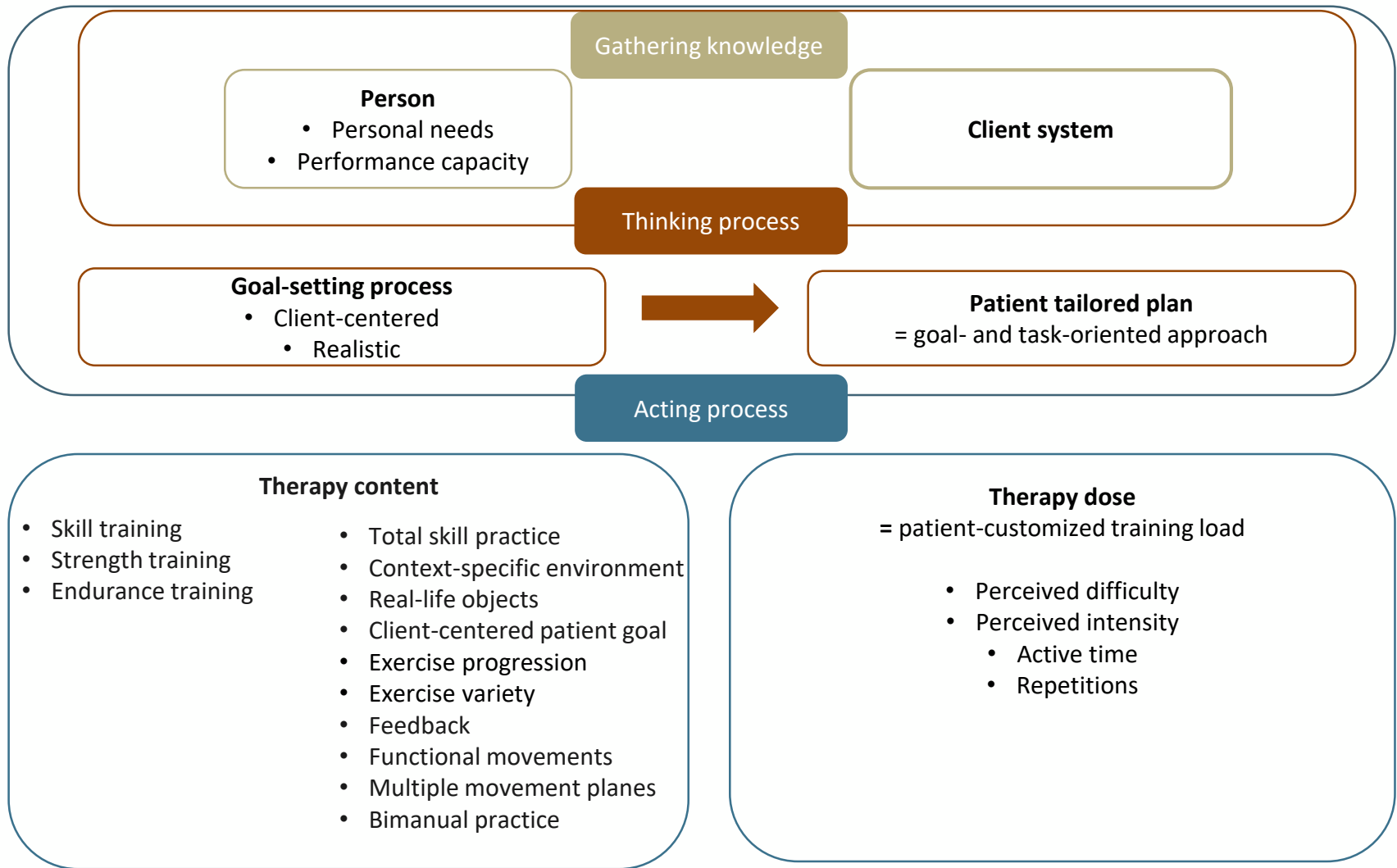


Method



Results





Gathering knowledge

Person

- Personal needs
- Performance capacity

Client system

Thinking process

Goal-setting process

- Client-centered
- Realistic



Patient tailored plan

= goal- and task-oriented approach

Acting process

Therapy content

- Skill training
- Strength training
- Endurance training
- Total skill practice
- Context-specific environment
- Real-life objects
- **Client-centered patient goal**
- **Exercise progression**
- **Exercise variety**
- Feedback
- **Functional movements**
- Multiple movement planes
- Bimanual practice

Therapy dose

= patient-customized training load

- **Perceived difficulty**
- **Perceived intensity**
 - Active time
 - Repetitions



Gathering knowledge

Person

- Personal needs
- Performance capacity

Optimal load capacity

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Goal-setting process

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HOW?

plan
= goal- and task-oriented approach

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Motivation

Gathering knowledge

Person

- Personal needs
- Performance capacity
- Optimal training load

Client system

Thinking process

Goal-setting process

- **Client-centered**
 - Realistic goal



Patient tailored plan

= goal- and task-oriented approach

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Active time

Practice beyond therapy

Training moments outside of therapy

More training moments need after discharge

Conclusion

Conceptual framework to enhance upper limb function at ICF activity level and integrating skills into daily life

- to guide therapists throughout the process of skill training
- to provide insights into the interconnection of different phases and components

Next step

E-Delphi study with experts worldwide to verify the completeness of the framework internationally

Are you a PT or OT with at least 5 years of experiences and interested to participate?

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Thank you!



Dr. van Laake-Geelen and team
Dr. Yvonne Janssen-Potten



Dr. Borgions and team



Prof. Oostra and team

