

Learning to use a prosthesis by playing a video game.

No registrations found.

Ethical review	Not applicable
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON25192

Source

Nationaal Trial Register

Brief title

Serious gaming for prosthesis use.

Health condition

EMG
serious gaming
myoelectric prosthesis
Motor learning
Transfer

Sponsors and support

Primary sponsor: University of Groningen

University Medical Center Groningen

NHL University of Applied Sciences

Source(s) of monetary or material Support: Northern Netherlands Provinces Alliance

Intervention

Outcome measures

Primary outcome

Prosthesis simulator task:

Duration of the grasp

Maximum size of hand opening

Duration of maximum hand opening

Amount of compression object

Secondary outcome

In-game performance:

Accuracy

EMG-game relation

Game engagement Questionnaire

Study description

Study objective

Playing a EMG controlled video game that simulates relevant aspects of ADL prosthesis use, will lead to improved performance of a prosthesis task in comparison to controls.

Study design

Pre-posttest design. Measurements at day 1 and day 5.

Intervention

4 groups play several different games. 3 are controlled using a EMG-interface. 1 is a sham-training (control) using a regular video game.

Contacts

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Eligibility criteria

Inclusion criteria

Able-bodied participants, age 18-40.

Exclusion criteria

Left-handedness

(History of) disorders of the arm/upper body

Prior experience using a myoelectric prosthesis

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)

Control: Active

Recruitment

NL
Recruitment status: Recruiting
Start date (anticipated): 10-11-2014
Enrollment: 50
Type: Anticipated

Ethics review

Not applicable
Application type: Not applicable

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL4701
NTR-old	NTR4907
Other	: UMCG-BW-SPRINT-WP9-2-1214

Study results