Development of Joint Coordination

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON20285

Source
Nationaal Trial Register

Brief title
-

Health condition

Joint Coordination
Typically developing children
Variability

Sponsors and support

Primary sponsor: University Medical Center Groningen
Source(s) of monetary or material Support: University Medical Center Groningen

Intervention

Outcome measures

Primary outcome

UCM Values (GEV and NGEV)

Secondary outcome

Joint position data, Kinematics of the end-effector

Study description

Background summary

Being able to move the hand in space, either to a stationary target or a target of which the location has a certain degree of uncertainty is essential during daily life. Fundamental knowledge of how the skill of reaching develops during childhood is of primary importance. Most research has been on outcome measures of reaching tasks such as accuracy, thereby ignoring joint coordination bringing about that task performance. The nervous system has the ability to generate different joint angle combinations while keeping the end-effector movement unaffected. The Uncontrolled Manifold (UCM) method will be used to determine which part of the variability in joint coordination is goal-directed and which part leads away from the intended task performance, meaning the structure of variability in joint coordination is determined. The current study aims to determine age-related changes in variability in joint angles in children aged 5 to 10 years of age.

Study objective

Younger children

Intervention

no intervention will be applyed in this study

Contacts

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Eligibility criteria

Inclusion criteria

In order to be eligible to participate in this study, a subject must meet all of the following criteria:

- Aged between 5 and 10 years

- Right handed

- Being able to follow the test instructions

- Parental consent

- normal or corrected to normal visual sight

Exclusion criteria

A potential subject who meets any of the following criteria will be excluded from participation in this study:

-Any upper extremity problems, in particular neurological diseases, recent injuries or musculoskeletal problems in the neck, shoulder, arm or hand regions

Study design

Design

Study type:	Observational non invasive
Intervention model:	Crossover
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL
Recruitment status: Pending

Start date (anticipated):	01-03-2016
Enrollment:	75
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	NL5666
NTR-old	NTR5800
Other	: ECB/2016.02.18_1

Study results