Learning a novel task during mid-childhood

Gepubliceerd: 03-03-2017 Laatst bijgewerkt: 18-08-2022

We expect that younger children have a higher learning capacity at the end-effector level, thus they should be faster in learning to handle the visuomotor transformation task than older children.

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON25866

Bron
NTR

Aandoening

Motor development, Children, Movement coordination, Learning

Ondersteuning

Primaire sponsor: University Medical Center Groningen (UMCG)
Overige ondersteuning: University of Groningen, University Medical Center Groningen (UMCG)

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

-Kinematic measures of the reaching movement of the tip of the index finger
-Joint ranges of motion
-Uncontrolled manifold analyses

Toelichting onderzoek

Achtergrond van het onderzoek

Mid-childhood (5- to 10-year of age) is an important developmental period in which action-perception skills acquired during infancy further refine. Previous studies have exclusively focused on movements of the index finger, analyzing performance measures such as movement time and accuracy. We aim to broaden the study of development of reaching in mid-childhood by focusing in addition to the movement of the index finger also on the movements of the joints of the arm. Because we also focus on the joint angle level, we can relate exploratory behavior in the joint angles to the performance improvements of the index finger when learning a novel task. We are therefore able to not only describe changes over learning but we are able to test an underlying process, like exploration, that could explain changes over learning as well as changes over development.

Doel van het onderzoek

We expect that younger children have a higher learning capacity at the end-effector level, thus they should be faster in learning to handle the visuomotor transformation task than older children.

Onderzoeksopzet

Participants will be measured once.

Onderzoeksproduct en/of interventie

No intervention is applied.

Contactpersonen

Publiek

Centre for Human Movement Science, UMCG

Laura Golenia
Groningen
The Netherlands
050-3632651

Wetenschappelijk

Centre for Human Movement Science, UMCG

Laura Golenia
Groningen
The Netherlands
050-3632651

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

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

- typically developing

- Right handed

- Being able to follow the test instructions

- Parental consent

- normal or corrected to normal visual sight

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Children will be excluded when motor skill abilities, established by the Movement ABC-2 test, are below norms for age.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Cross-over
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	13-03-2017
Aantal proefpersonen:	75
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	03-03-2017
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL6232

Register	ID
NTR-old	NTR6412
Ander register	: ECB_2017.02.02_1

Resultaten