# Exploratory study of children with Developmental Coordination Disorder (DCD), aged 7-12 years, learning newmotor based skills, post CO-OP intervention (Cognitive Orientation to daily Occupational Performance).

Published: 01-03-2010 Last updated: 02-05-2024

Gaining knowledge on how children with DCD post CO-OP intervention go about learning new motor based skills, and if, and what cognitive strategies they use then. These insights might contribute to the work of occupational therapists who provide the...

**Ethical review** Approved WMO **Status** Recruitment stopped

**Health condition type** Other condition

**Study type** Observational non invasive

## **Summary**

#### ID

NL-OMON35113

#### **Source**

**ToetsingOnline** 

#### **Brief title**

Learning new motor-based skills post CO-OP with children with DCD.

#### **Condition**

Other condition

### Synonym

Developmental Coordination Disorder (DCD), marked impairment of the performance of motor skills

#### **Health condition**

Developmental Coordinator Disorder (DCD)

#### Research involving

Human

## **Sponsors and support**

Primary sponsor: Hogeschool Zuyd

Source(s) of monetary or material Support: Ministerie van OC&W

#### Intervention

Keyword: go about learning new skills, post CO-OP intervention, strategy-use

#### **Outcome measures**

#### **Primary outcome**

Section 1

An interpretative description by the child about learning new motor-based skills

Section 2

A description, by the child, on how (s)he performs a new motor-based skills.

If, then what cognitive strategies does the child report while viewing his

performance on videotape

#### **Secondary outcome**

n/a

# **Study description**

#### **Background summary**

Children with Developmental Coordination Disorder (DCD) have a marked impairment in the performance of motor skills. This impairment can have

2 - Exploratory study of children with Developmental Coordination Disorder (DCD), ag ... 6-05-2025

significant negative impact on every day activities of childhood e.g., dressing, riding a bike, hand writing. It also may lead to secondary mental health and educational problems.

\*Cognitive Orientation to daily Occupational Performance (CO-OP) is a client-centered, performance-based, problem solving approach that enables skill acquisition through a process of strategy use and guided discovery\* (Polatajko & Mandich, 2004, p. 2). Several studies demonstrated the effectiveness of CO-OP with children with DCD, aged 5-12. In this task-oriented approach, guided discovery and homework are used to support skill transfer, a major objective of the approach.

Empirical evidence on transfer (degree to which learning one skill influences the learning of another skill) shows that children do learn new motor-based skills by themselves seven till twelve months after intervention. But we don\*t know how they do this. How do children go about learning, post intervention? Do they use the strategies acquired during CO-OP? Are they able to discover new strategies themselves?

#### Study objective

Gaining knowledge on how children with DCD post CO-OP intervention go about learning new motor based skills, and if, and what cognitive strategies they use then.

These insights might contribute to the work of occupational therapists who provide the CO-OP approach for children with DCD. They ofter receive questions/remarks from parents and significant others about the problems the children are facing, about how to support the children during their daily activities.

#### Study design

This research will focus on two questions:

- 1. How do children with Developmental Coordination Disorder (DCD) go about learning new motor-based skills after occupational therapy with Cognitive Orientation to daily Occupational Performance (CO-OP) intervention?
- 2. Do they use strategies and if so, what cognitive strategies do they report?

This research will be conducted as a mixed method research. The first question will be addressed in the qualitative tradition using the Interpretative Phenomenological Analysis as described by Smith et al., (2009). The second question will be addressed within a descriptive quantitative approach using the retrospective Think Aloud Protocol Analysis, verbal reports as data described by Ericcson & Simon (1993).

#### Study burden and risks

Burden for the occupational therapist:

- monitor if a child is meeting the in/exclusion criteria
- giving the researcher the possibility to check the occupational therapy file.

#### Burden for the parents:

- read the information letter, discuss it with the child
- organising, planning the appointments with the researcher and child
- allow the researcher to carry out the research in the home situation

#### Burden for the child:

- spending ± 2 hours with the researcher
- participating twice in an interview
- allowing the researcher to record the performance of a motor-based skill on video

Potential risks are a possible confrontation for the child regarding his way of learning, his performing motor-based skills. This can cause some emotional disturbance.

## **Contacts**

#### **Public**

Hogeschool Zuyd

Nieuw Eyckholt 300 6419 DJ Heerlen NL

#### Scientific

Hogeschool Zuyd

Nieuw Eyckholt 300 6419 DJ Heerlen NL

# **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Children (2-11 years)

#### **Inclusion criteria**

- child between 7-12 years old
- child has finished occupational therapy with the CO-OP approach since at least 3 months
- the occupational therapy was provided by an occupational therapist who did the novice workshop on CO-OP
- child is diagnosed with DCD according to the Dutch agreement (Reinders-Messelink et al., 2003). Comorbidity with ADHD or LD is allowed.

#### **Exclusion criteria**

- no other treatment (medical, allied health care, psychological) has started since finishing OT
- difficulties with verbal communication in the Dutch language
- for the second part of the research: children who had not learned new tasks post CO-OP intervention

# Study design

## **Design**

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-03-2010

Enrollment: 6

Type: Actual

## **Ethics review**

Approved WMO

Date: 01-03-2010

Application type: First submission

Review commission: METC Z: Zuyderland-Zuyd (Heerlen)

# **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

CCMO NL31165.096.10