Increasing motor skills and physical activitiy in children with Developmental Coordination Disorder

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Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON23228

Bron
NTR

Aandoening

motor skills
physical activity
perceived motor competence
DCD

Dutch:
motorische vaardigheden
fysieke activiteit
motorische competentiebeleving
DCD

Ondersteuning

Primaire sponsor: University Medical Centre Utrecht (UMCU)
Child Development and Exercise Centre
Wilhelmina Children’s Hospital/ UMCU
KB 02.056.0, Lundlaan 6

3584 EA Utrecht
Overige ondersteuning: Vormingsfonds Oefentherapie Cesar

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

- physical activity as assessed with a pedometer and parental proxi-reports

Toelichting onderzoek

Achtergrond van het onderzoek

Summary

Rationale: Children with Developmental Coordination Disorder (DCD) experience difficulties in participation in daily life that require motor skills. Evidence suggests task-oriented motor interventions to be beneficial for improving motor skills in children with DCD. However, whether the newly learned motor skills lead to an increase in the amount of physical activities has not been investigated yet. Secondly, children with DCD are shown to have a lower perceived motor competence compared to typically developing children, which in turn, is a significant predictor of physical activity in children. Therefore, motor interventions that (also) aim to increase perceived motor competence might potentially be beneficial to improve both motor skills and physical activity in children with DCD. Studies investigating a possible additional benefit of focussing on a child's perceived competence are currently lacking.

Objective: To investigate the short-term and long-term effects of a 12-week motor skills intervention, including behavioural motivation techniques, on physical activity, motor skills, perceived motor competence and global self-worth in children with DCD.

Study design: The study is a Clinical Controlled Trial (CCT). Assessors and paediatric therapists that administer care as usual to the control group will be blinded for treatment allocation. Assessment of both the intervention group and control group will take place at baseline (T0), after 12 treatment sessions (T1) and after 3 months of no intervention (T2).

Study population: In total, 48 children with DCD (age 7-10) will be recruited from three paediatric therapy practices in the Netherlands. Children referred to one of these paediatric therapy practices will function as the intervention group, while children referred to the other two paediatric therapy practices will function as the control group.

Intervention: Children in the intervention group will receive twelve individual-tailored

treatment sessions of 30 minutes once a week. Treatment goals will be set for each child individually based upon structured assessment of the child’s motor skills and perceived motor competence. A variety of functional tasks and gross motor play activities will be given to enhance motor skills. During intervention sessions, behavioural motivation techniques will be used in order to enhance children’s perceived motor competence and physical activity. All participating therapists will receive special training before intervention.
Children in the control group will receive care as usual for twelve treatment sessions of 30 minutes once a week.

Doel van het onderzoek

The hypothesis of this study is that an individual tailored task-oriented motor skills intervention with additional emphasis on behavioural motivation techniques will increase motor skills, physical activity, perceived motor competence and global self-worth in children with DCD.

Onderzoeksopzet

Assessment of both the intervention group and control group will take place at baseline (T0), after 12 treatment sessions (T1) and after 3 months of no intervention (T2)

Onderzoeksproduct en/of interventie

Intervention group:
Children in the intervention group will receive twelve individual-tailored treatment sessions of 30 minutes once a week. Treatment goals will be set for each child individually based upon structured assessment of the child’s motor skills and perceived motor competence. A variety of functional tasks and gross motor play activities will be given to enhance motor skills. During intervention sessions, behavioural motivation techniques will be used in order to enhance children’s perceived motor competence and physical activity. All participating therapists will receive special training before intervention.

Control group:

Children in the control group will receive care as usual for twelve treatment sessions of 30 minutes once a week.

Contactpersonen

Publiek

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

-Children referred to paediatric therapy by a general practitioner or school medical officer;

-Score on a standardised test of motor skills performance (MABC-II) below 16th percentile;

-An indication of DCD or suspected DCD on the Developmental Coordination Disorder Questionnaire 2007 as experienced by parents;

-A score below the advised amount of daily steps for children (boys < 15000; girls < 12000) on a pedometer (Yamax CW700);

-Age between 7 and 10;

-Parental informed consent and child verbal assent;

-No known neurological disorders causing motor problems (e.g. cerebral palsy, spina bifida etc.).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

-Insufficient understanding of the Dutch language;

-Children with only a low score (< 16th percentile) on the subscale manual dexterity of the MABC-II.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Niet-gerandomiseerd
Blindering:	Dubbelblind
Controle:	Geneesmiddel

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-09-2013
Aantal proefpersonen:	48
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	21-08-2013
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	NL3850
NTR-old	NTR4135
Ander register	NL43890.041.13 : 13/245
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Resultaten

Samenvatting resultaten
N/A