Robotic toys within occupational therapy for children with developmental disabilities.

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Objective:This study has as its aim to examine the short-term effect of a robotic-facilitated play therapy within occupational therapy on the level of playfulness of children with developmental disabilities aged 2-16 years.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Neurological disorders congenital
Study type	Interventional

Summary

ID

NL-OMON32682

Source
ToetsingOnline

Brief title
robot assisted play

Condition

- Neurological disorders congenital
- Mental impairment disorders
- Developmental disorders NEC

Synonym
developmental disability, intellectual disability

Research involving
Human

Sponsors and support

Primary sponsor: Hogeschool Zuyd, Kenniskring technologie in de zorg

Source(s) of monetary or material Support: Ministerie van OC&W,aanvraag.nl (NRF / Johanna Kinderfonds in aanvraag

Intervention

Keyword: developmental disabilities, occupational therapy, playfulness, robotic toy

Outcome measures

Primary outcome

Playfulness (Bundy, 2005; Bundy et al. 2009)

Data gathering will be done from three different view points. Video-observation will offer the method for scoring each participant on the Test of Playfulness (4.0 Bundy 2005) and the IROMEC evaluation questionnaire (2009 not published now). Additionally, the child*s perspective and the view point of the involved occupational therapists will be assessed.

Secondary outcome

not applicable

Study description

Background summary

Research tends to show a reduced playfulness in children with developmental disabilities. A high level of playfulness leads to engagement in play. Participation in children*s most important occupation, which is play, contributes health and well-being. New interventions that can foster the level of playfulness for this target group in occupational therapy need to be tested. It is expected that the introduction of a robot facilitated play in occupational therapy will have a favourable influence on the level of playfulness of children with developmental disabilities aged 2-16 years for the duration of the research period.

The robotic toy chosen for the investigation was developed within the European

project IROMEC, a three year project started in November 2006, co-funded by the European Commission within the RTD activities of the Strategic Objectives SO 2.61 *Advanced Robotics* of the 6th Framework Programme. The IROMEC robot is a modular and configurable robotic platform that can be used in therapy and education. It was specially developed for children with Autistic Spectrum Disorder, severe motor impaired children and children with intellectual disabilities. The appearance of the robotic toy is a mix of humanoid and vehicle like, depending on the horizontal or vertical position.

Study objective

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Study design

The study will be based on a single-subject time series approach belonging to the quasi-experimental designs.

Intervention

Two different interventions will be conducted by the responsible occupational therapists: playing playscenario's with the IROMEC robot and playing with normal toys during occupational therapy intervention.

Study burden and risks

negligible

Contacts

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Selecteer

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Scientific
Selecteer

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adolescents (12-15 years)
Adolescents (16-17 years)
Children (2-11 years)

Inclusion criteria

Child with primary diagnosis of developmental disability, age 2 - 16 years

Exclusion criteria

presence of sensory impairments (deafness and blindness) or severe motor impairments

Study design

Design

Study type: Interventional

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	03-05-2010
Enrollment:	3

Type:	Actual

Ethics review

Approved WMO Date:	15-12-2009
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	NL29944.096.09