The effectiveness of the serious game *Broodles* in improving psychosocial well-being of siblings (6-9 years old) of children with visual impairment and/or intellectual disability: A randomized controlled trial

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The goal of this study is to evaluate the effectiveness of the serious game *Broodles* in improving the quality of life and psychosocial well-being of siblings (6-9 years) of children with VI and/or ID.

Ethical review	Approved WMO
Status	Completed
Health condition type	Family issues
Study type	Interventional

Summary

ID

NL-OMON53893

Source
ToetsingOnline

Brief title
Effectiveness of the serious game *Broodles*

Condition

- Family issues

Synonym
brothers and sisters of children with disabilities, siblings

Research involving

Human

Sponsors and support

Primary sponsor: Vrije Universiteit
Source(s) of monetary or material Support: ZonMW;Academische Werkplaats Bartiméus - VU

Intervention

Keyword: intellectual disability, serious game, siblings, visual impairment

Outcome measures

Primary outcome

The effectiveness of the serious game *Broodles* is determined by measuring quality of life and sibling adjustment to and perceptions of the disability of the brother or sister. Changes within the two groups, the experimental group and the control group, will be compared.

Secondary outcome

Additionally the effect of the serious game on the following outcome measures will be investigated:

- Sibling self-esteem
- Sibling experienced social support
- Sibling relationship
- Sibling coping skills
- Parent-child relationship
- Parenting self-efficacy

Finally it will be investigated how the parents and siblings experience the

effectiveness, desirability and applicability of the intervention.

Study description

Background summary

The support for siblings of children with disabilities is scarce and fragmented, even though studies have shown that these siblings can benefit from support (Mandleco & Webb, 2015). Although some interventions for siblings have been developed, these are costly and time-consuming and the effects have not been researched thoroughly with randomized controlled trials. This study will investigate the effectiveness of the first serious game for siblings (aged 6-9 years) of children with VI and/or ID, using a RCT-design with closed and open-ended questions.

Study objective

The goal of this study is to evaluate the effectiveness of the serious game *Broodles* in improving the quality of life and psychosocial well-being of siblings (6-9 years) of children with VI and/or ID.

Study design

The impact of the serious game *Broodles* will be examined in a randomized controlled trial (RCT) with a pre-test (T0), post-test (T1) and follow-up (T2). There will be two groups, namely an experimental group playing the serious game and a waitlist control group receiving care as usual. Mixed methods in the assessments will be used including questionnaires, drawings and open-ended questions.

Intervention

The intervention is a serious game, named 'Broodles', that addresses how to handle with thoughts and emotions concerning several important issues in the lives of siblings. In addition to the serious game, children make offline worksheets and parents receive tips and information how to support their child.

Study burden and risks

The present study will burden participants with a number of assessments with a total duration of around 4,5 hours. In addition to the assessments, the experimental group will play the serious game *Broodles* which will take around

2,5 hours in total. Additional offline exercises will take around 4 hours in total. There are no risks. We expect that the participants in the experimental conditions will benefit from playing the game, namely their quality of life and psychosocial well-being is expected to improve.

Contacts

Public
Vrije Universiteit

De Boelelaan 1105
Amsterdam 1081 HV
NL
Scientific
Vrije Universiteit

De Boelelaan 1105
Amsterdam 1081 HV
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Children (2-11 years)

Inclusion criteria

- Children aged 6 year and older but younger than 10 years (up to 9 years and 11 months) and one of their parents/caregivers.
- Children that have a brother or sister with (strongly suspected) visual impairment and/or intellectual disability (0-18 years old), with possibly other comorbid disabilities, disorders or illnesses.
- The brother or sister with a disability lives in the same house (at least

part of the time)
- Children living in the Netherlands or Flanders (Dutch speaking part of Belgium)
- Children with normal intelligence and vision

Exclusion criteria

- Brother or sister with VI and/or ID lives in a residential care facility on a full-time basis
- One or both parents have a disability or impairment
- Not speaking the Dutch language
- No written consent from the participant and/or their legal representative
- Another sibling in the household is already included in the study

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Prevention

Recruitment

NL

Recruitment status:	Completed
Start date (anticipated):	22-04-2022
Enrollment:	308
Type:	Actual

Ethics review

Approved WMO

Date:	21-03-2022
Application type:	First submission

Review commission: METC Amsterdam UMC

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	NL79852.029.22

Study results

Date completed: 06-04-2024

Results posted: 24-01-2025

First publication
17-01-2025