CREW Studie
Cognitieve REmediatie en Werk

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FACT platform

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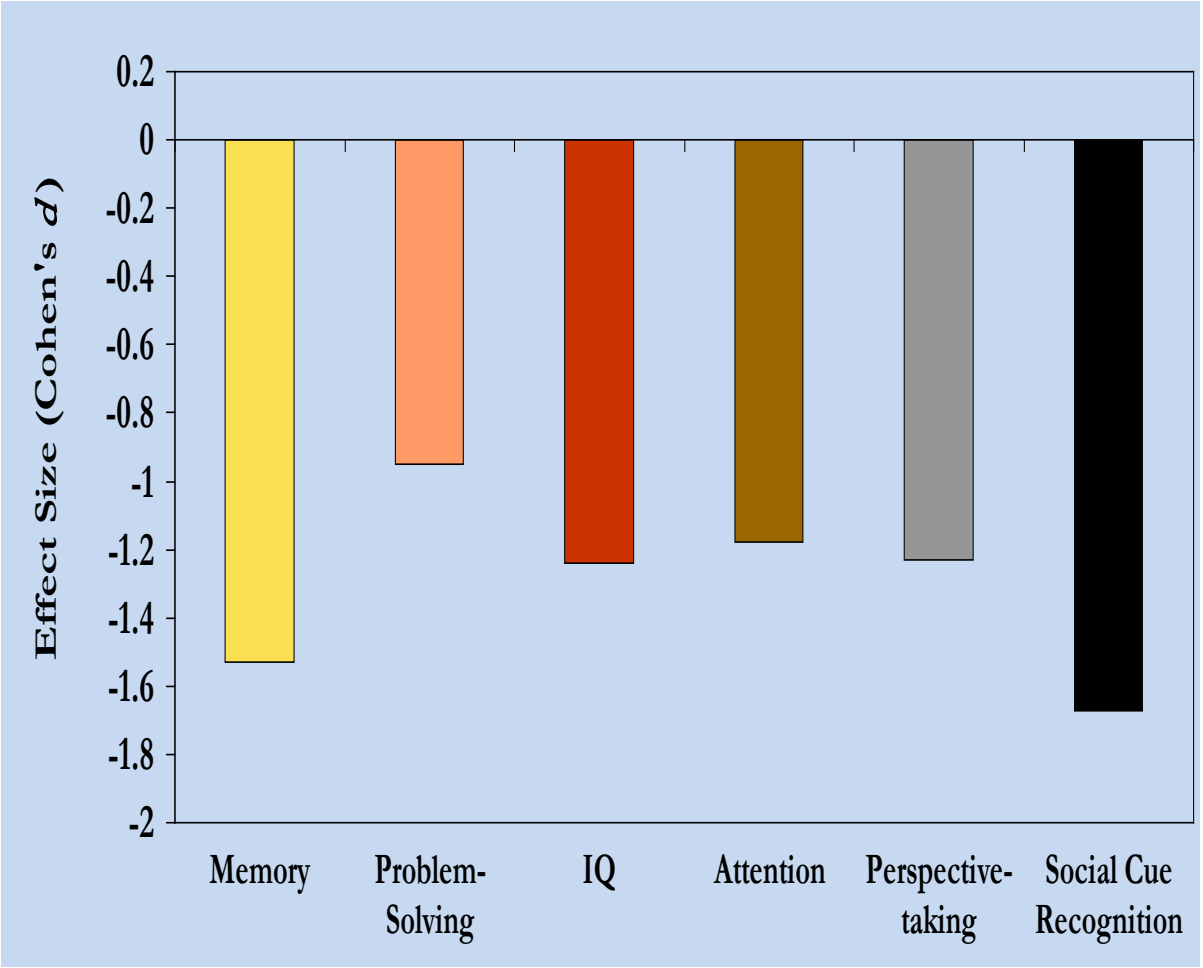
Disclosure: geen potentiele conflicts of interest te melden

Cognitieve problemen

Cognitieve problemen bij psychose:

- 75-90% tov algemene bevolking
- bijna 100% tov premorbide
- grote invloed kwaliteit van leven en dagelijks functioneren



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Behandeling cognitieve problemen

Weinig aandacht:

- AP en AD geen vermindering
- CR verbetert vooral scores op cognitieve testen

MA over CR:

- Aanwijzingen CR meer effect op functioneren in combinatie met PR *(Wykes et al, 2011)*

CREW trial

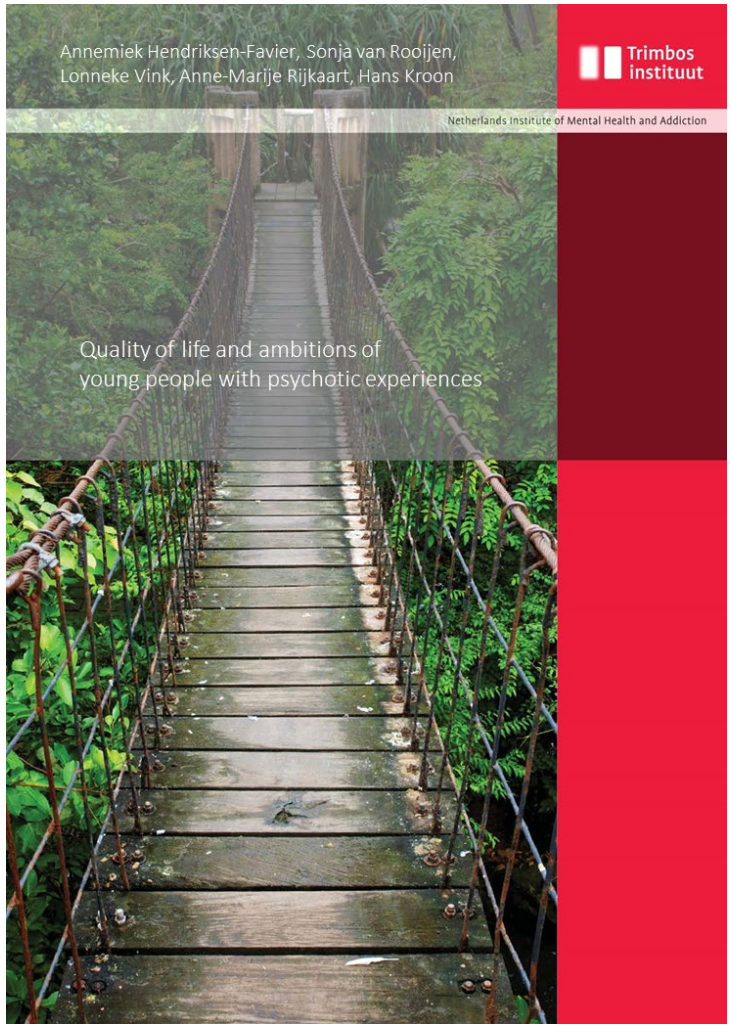
- Multi-site Randomised Controlled Trial (2014-2018)

Onderzoeksvraag:

Wat is de toegevoegde waarde van cognitieve remediatie (CR)
als aanvulling op Individual Placement and Support (IPS)
voor deelname aan reguliere arbeid en/of opleiding
bij mensen met een vroege psychose?

IPS + CR < versus > IPS + Control

Waarom dit onderzoek?



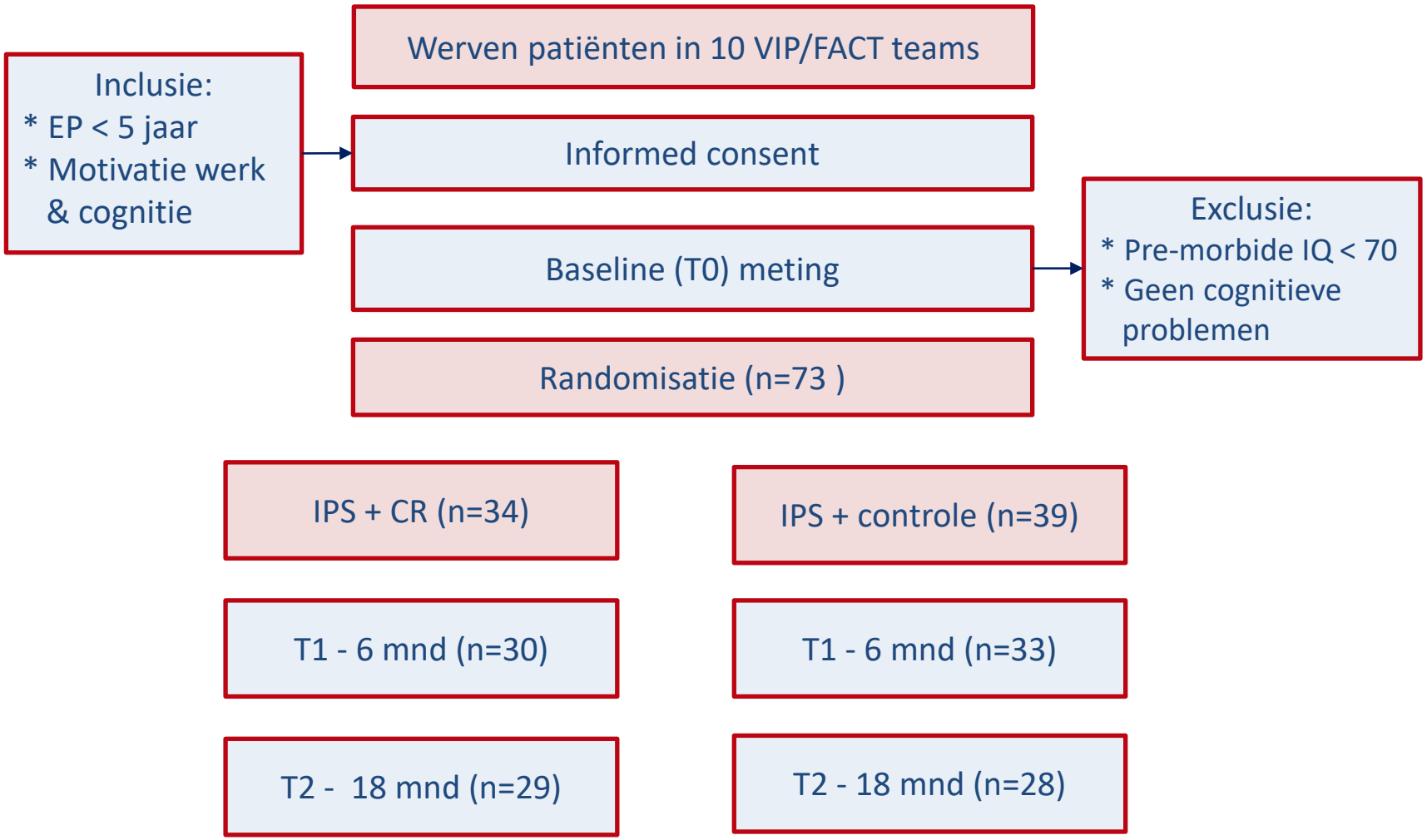
Jonge mensen met psychose

- Gelijke ambities
- Ervaren cognitieve problemen
- Vroege begeleiding werk / opleiding & cognitie nodig

Literatuur

- IPS is effectief, ook in VP *(Killackey, 2012; Nuechterlein, 2008)*
- Geen participatie in reguliere banen / opleiding 40-50%
- Eén van obstakels: cognitieve problemen *(McGurk, 2000; Gold, 2002)*

CREW trial


Inclusie:
* EP < 5 jaar
* Motivatie werk & cognitie
Werven patiënten in 10 VIP/FACT teams
Informed consent
Baseline (T0) meting
Randomisatie (n=73)
Exclusie:
* Pre-morbide IQ < 70
* Geen cognitieve problemen
IPS + CR (n=34)
T1 - 6 mnd (n=30)
T2 - 18 mnd (n=29)
IPS + controle (n=39)
T1 - 6 mnd (n=33)
T2 - 18 mnd (n=28)

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Wat is cognitieve remediatie?

"Cognitive remediation is an intervention targeting cognitive deficit (attention, memory, executive function, social cognition or meta cognition) using scientific principles of learning with the ultimate goal of improving functional outcomes."

Cognitive Remediation Expert Working, Group 2012

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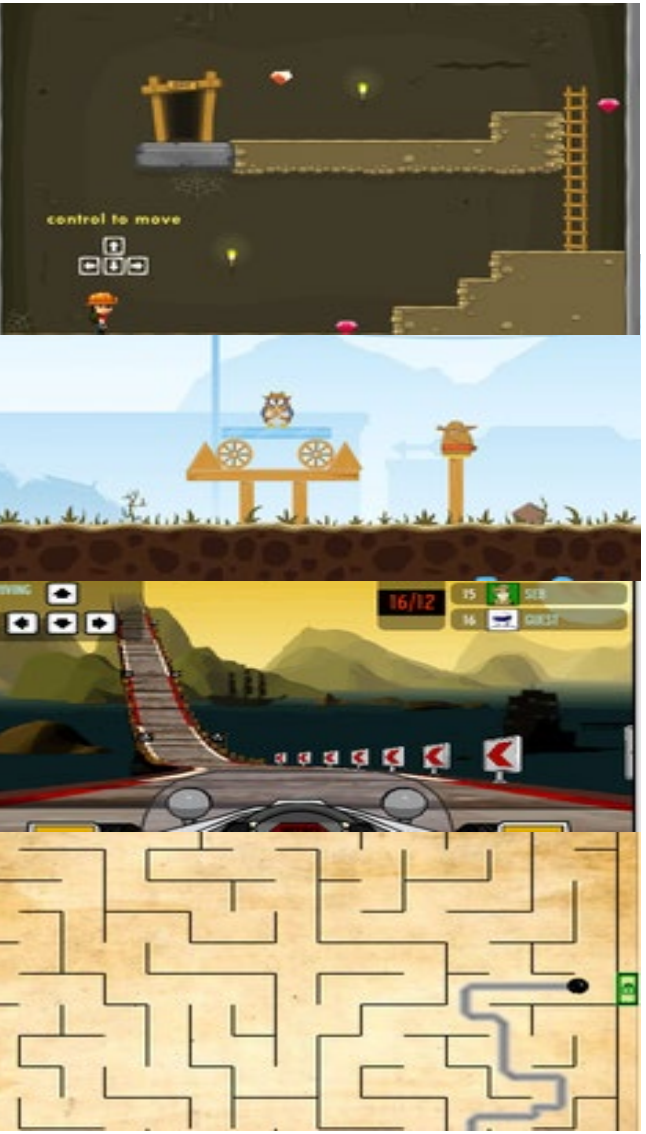
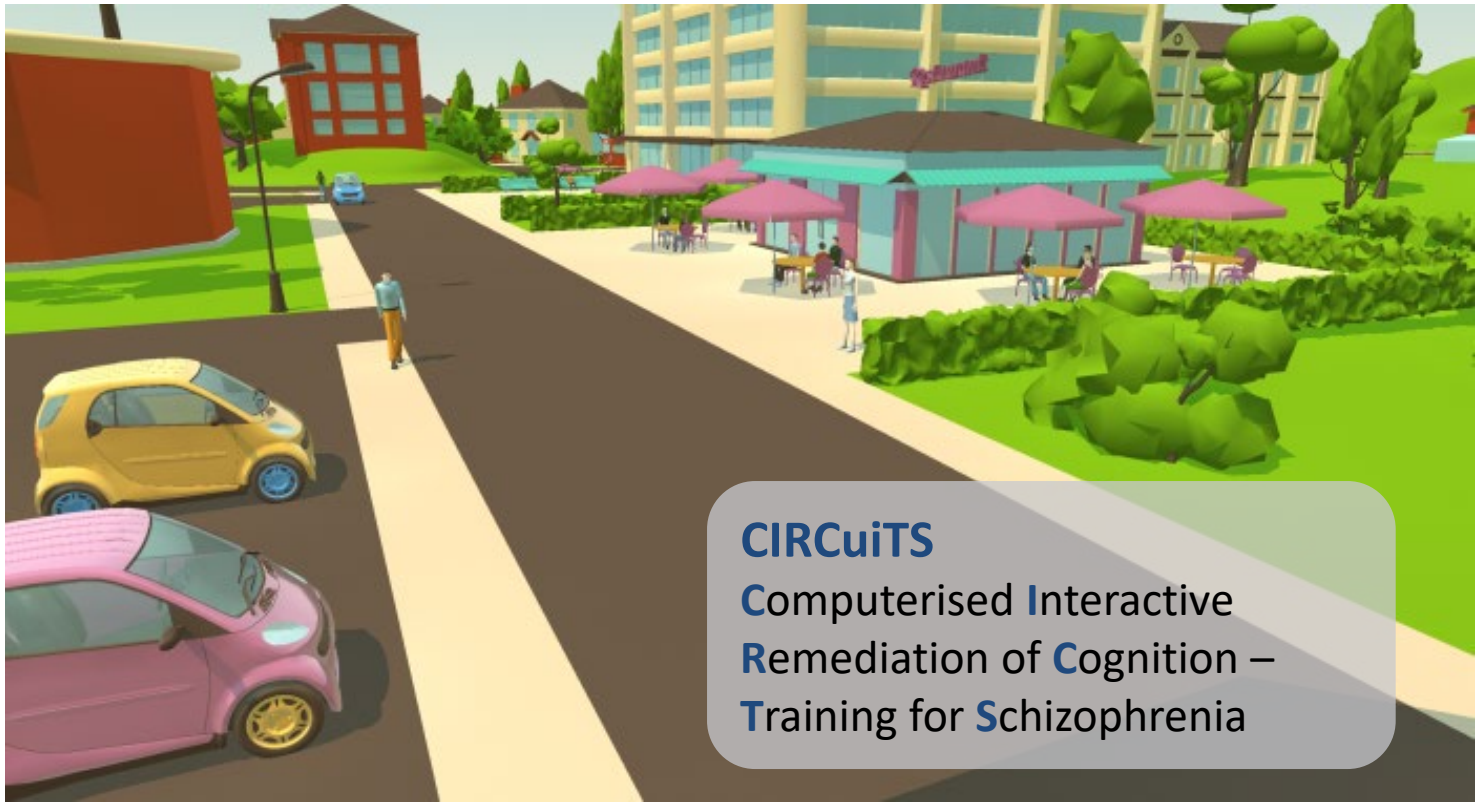
Actieve controle groep



- Controle conditie:
  - 5 computer spellen
  - Gelijke frequentie en duur
- Controleren aspecifieke elementen interventie:
  - Reguliere computertaken
  - Aandacht therapeut
- Controleren placebo effect

CR programma
CIRCuiTS



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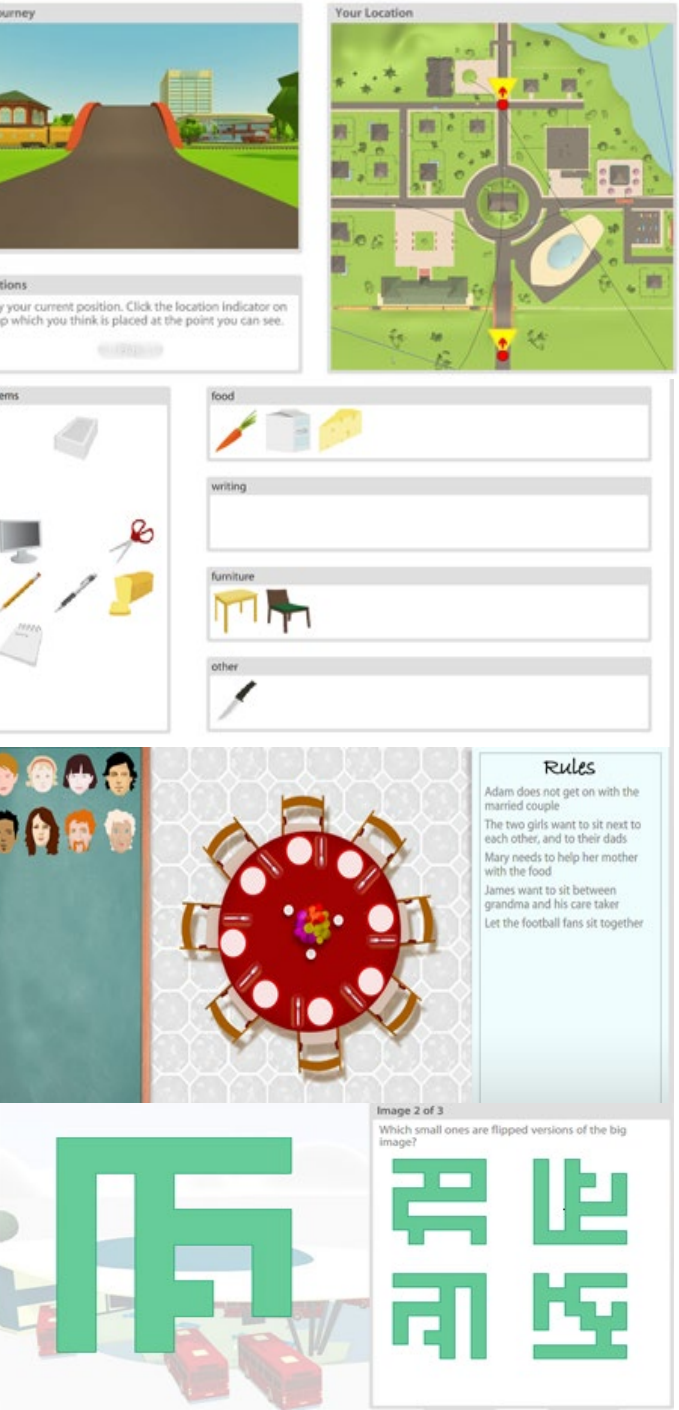
University of London

Trimbos instituut

Phrenos kenniscentrum



CIRCuiTS

Phrenos kenniscentrum

- Cognitieve functies:
  - Executief functioneren
  - Geheugen
  - Aandacht
- Doelen CRT
  - Verbeteren cognitieve vaardigheden
  - Effect rehabilitatieprogramma's (IPS) verhogen
  - Sociaal functioneren verbeteren
- Opzet CRT
  - 40 sessies, 3 x per week
  - sessies oplopend: 10 min > 60 min

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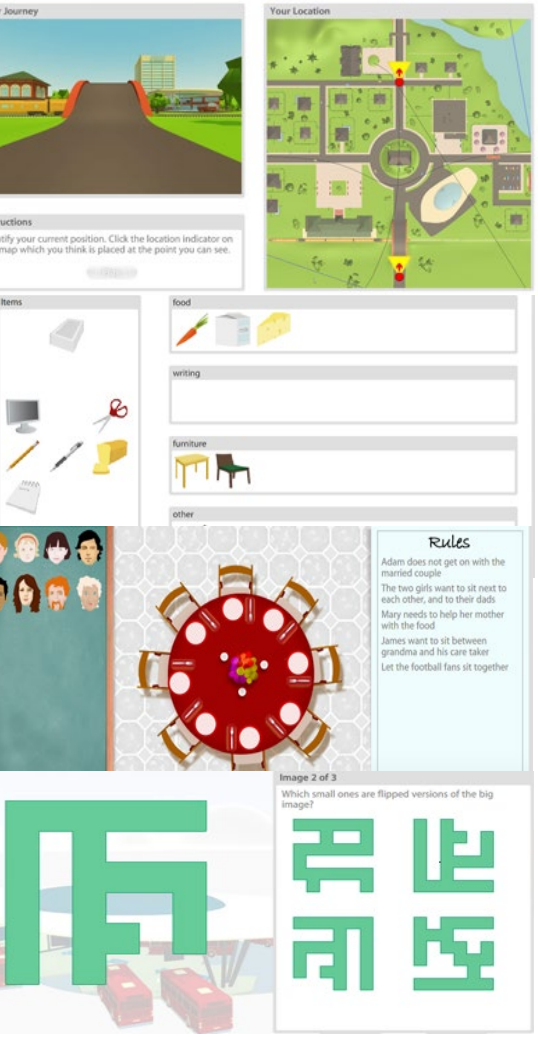
Leerprincipes CIRCUITS



- Massed practice
- Gefaciliteerd door therapeut
- Errorless learning - scaffolding

- Strategieën aanleren
- Meta-cognitie
- Transfer naar dagelijks leven

CIRCuiTS: het dorp

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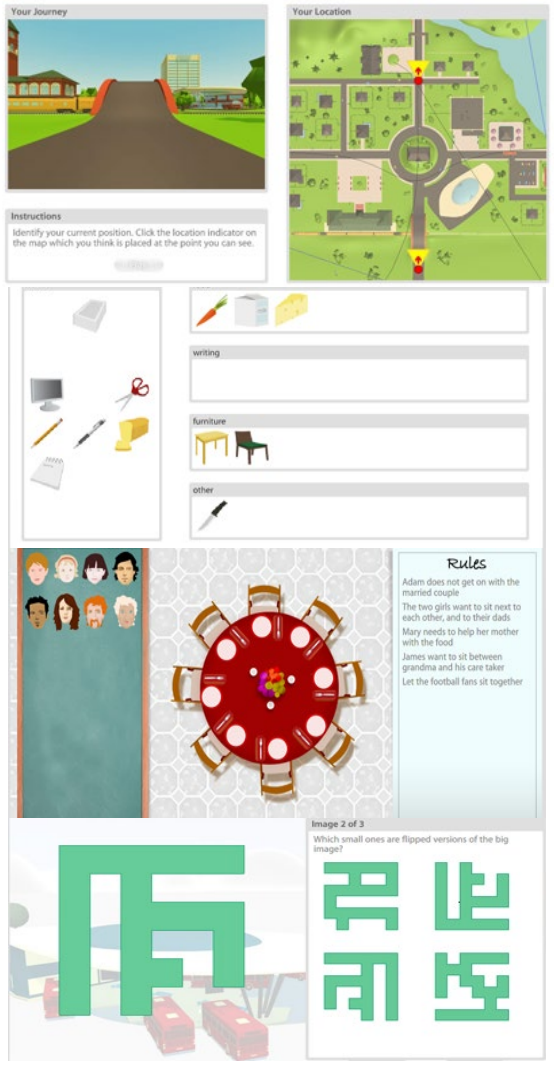
CIRCUITS
Alertheid
DEMO
Let op de pijlen die naar boven wijzen...
Hier is er een, dus klik op de 'OK' knop.
OK
Start


00:18
CIRCUITS
B
Instructies
Je woont in de buurt van Shambrook en gaat zaterdag met een vriend lunchen in Clapham. Jullie hebben om 12:45 afgesproken.
Vraag
Hoe laat moet je met de bus vanuit Shambrook vertrekken?
Jouw Route
Shambrook naar Clapham
Vertrek:
Aankomst:
Tekenen
S
Gereed

CR Therapeut



- Therapeut
  - SPV
  - psycholoog (in opleiding)
  - trajectbegeleider
  - casemanager
- Rol van therapeut
  - patiënten motiveren voor CRT
  - op maat maken sessies en taken
  - metacognitie verbeteren
  - koppeling vaardigheden - dagelijks leven

01:49

C I R C U I T S

Overlappende figuren

Score

Goed gedaan, je hebt de opdracht afgemaakt!

Moeilijkheidsgraad opdracht

Hoe moeilijk vond je deze opdracht?

GEMAKKELIJK-----MOEILIJK

1 2 3 4 5

De opdracht kostte je 1 minuut en 49 seconden.
Je dacht er 1 tot 3 minuten voor nodig te hebben.

Strategieën

Hoe nuttig waren de strategieën? NUTTELOOS-------NUTTIG

1,2,3..	Werk de kleine afbeeldingen in de meest logische volgorde af	1 2 3 4 5
	Kijk van boven naar onder en van links naar rechts	1 2 3 4 5
	Vind de corresponderende figuren	1 2 3 4 5
?	Anders	1 2 3 4 5

Einde

Feasability Circuits

Feasible: 1 begeleide sessie + 1 huiswerk sessie, gem: 25 sessies

Patiënten vinden plezierige interventie

- op praktische manier aan doelen werken
- kan vertalen naar persoonlijke situatie

"Ik vond het prettig om onafhankelijke achter de computer te werken. Ik zou meer programma's zoals deze willen volgen"

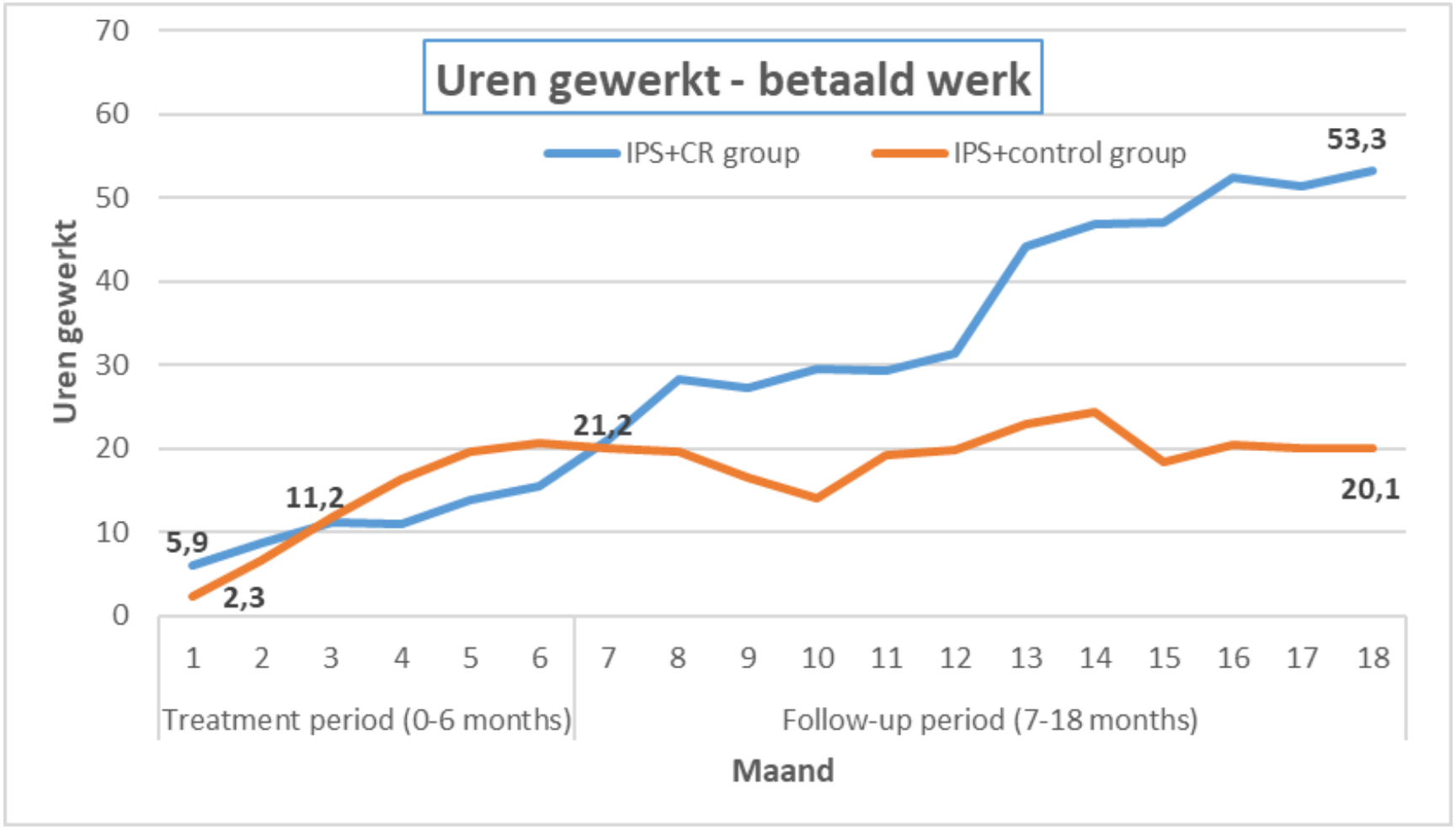
Therapeuten: Cognitie makkelijk beïnvloedbaar. Kleine verbeteringen dagelijks leven:

- leerde strategieën om dingen beter te onthouden
- beter tijd inschatten: niet meer 2 uur vooraf aanwezig
- kind 's avonds boek voorlezen

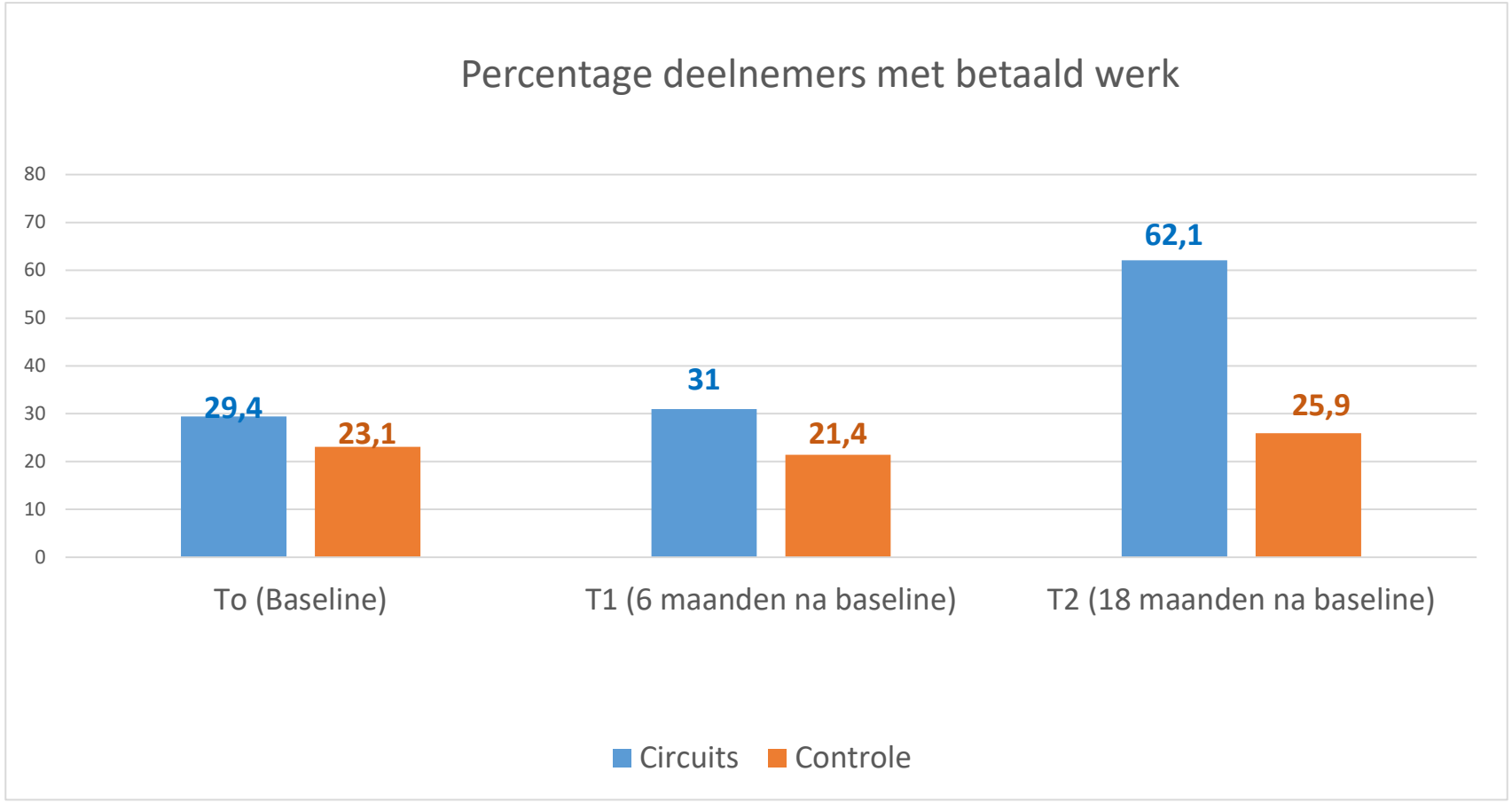
Beperking: Circuits vraagt veel 'tailoring' van CR therapeut:

- te makkelijk voor hoog opgeleiden
- frustrerend voor laag functionerende patiënten
- kennis cognitie nodig voor transfer dagelijkse praktijk (werk & opleiding)

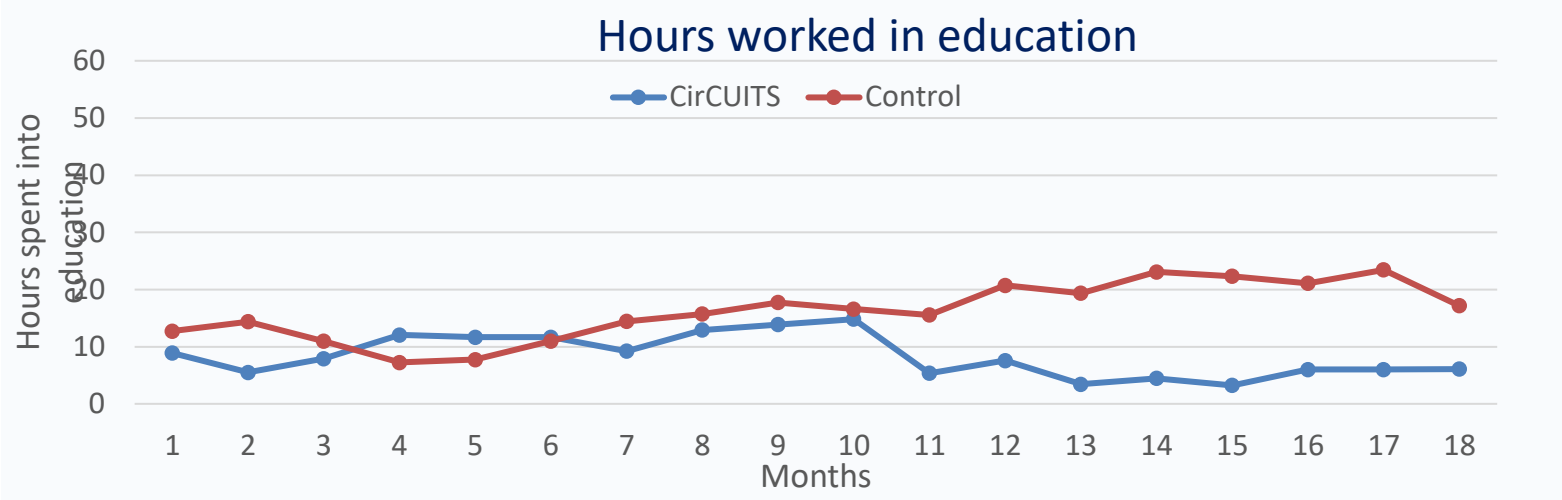
Patiëntuitkomsten
Aantal uur gewerkt betaald werk

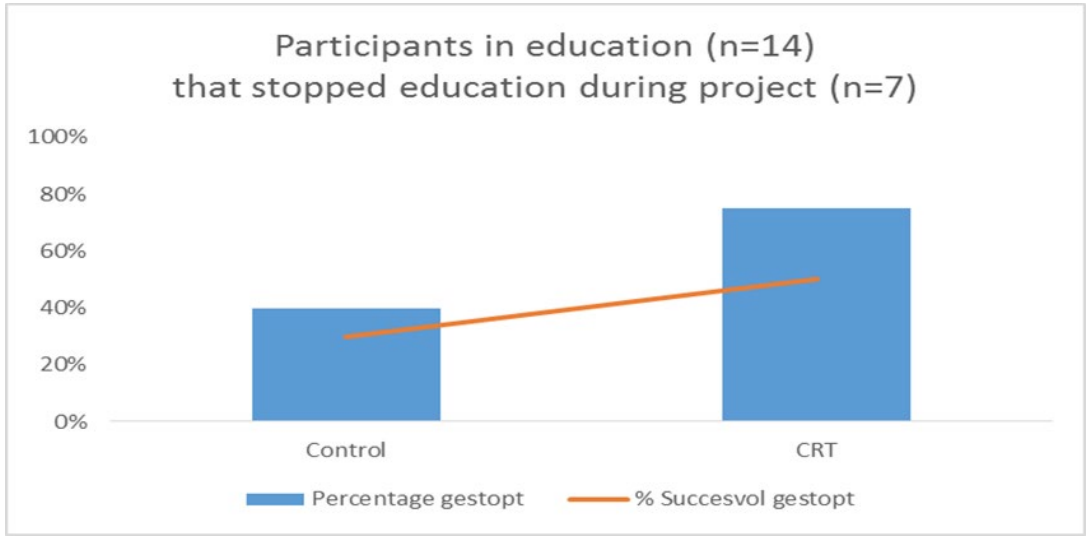


Patiëntuitkomsten
Percentage met betaald werk

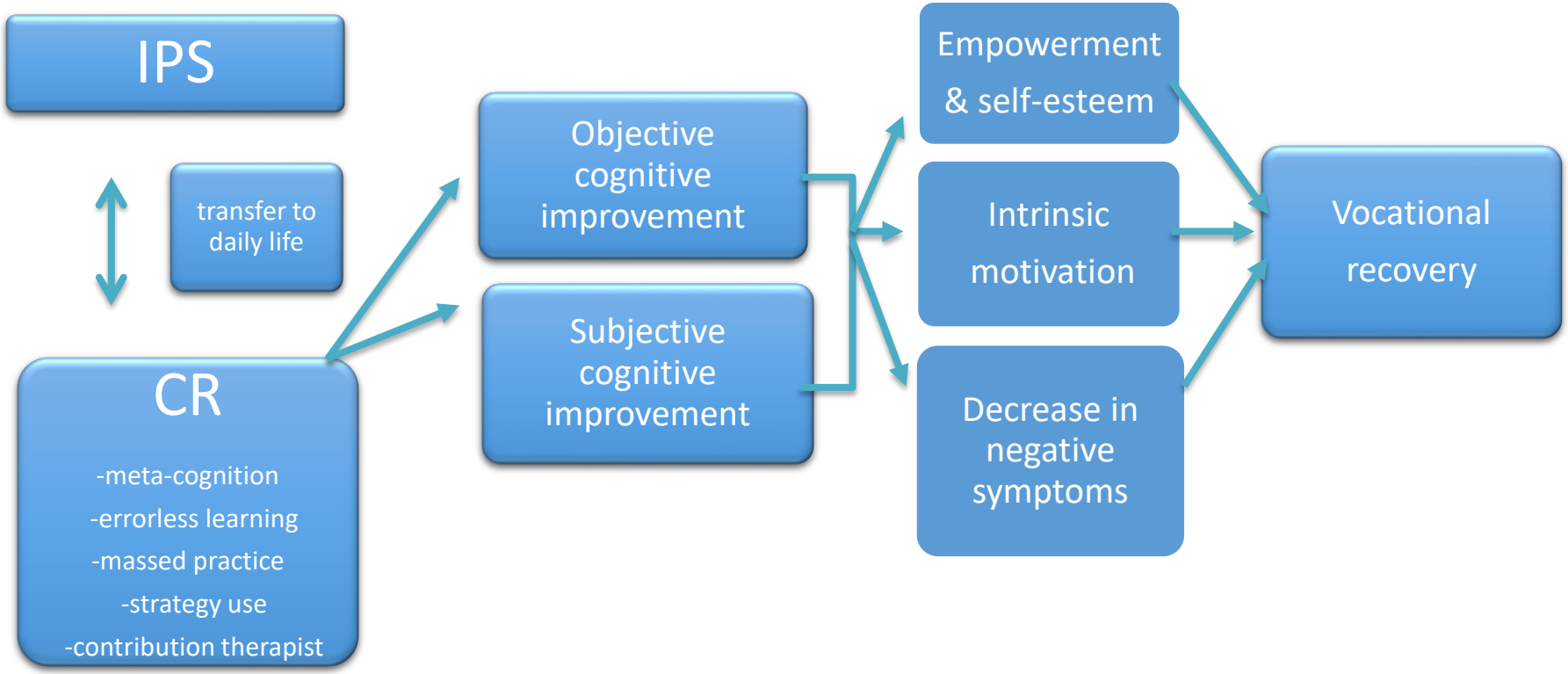


Patiëntuitkomsten
Deelname aan opleiding





Patiëntuitkomsten
Secundaire uitkomstmaten



Synergetisch effect

CR verstrekt IPS door:

- beter *opnemen* informatie door betere aandacht en geheugen
- beter *toepassen* informatie in werk en opleiding door betere executieve functies

IPS versterkt CR door:

- betere *transfer* naar dagelijks leven
- cognitieve vaardigheden *oefenen*
- cognitieve skills meer *relevant* binnen doel die zelf geprioriteerd

MA [Rehabilitatie + CR] versus [Rehabilitatie] (n=1.819)

Outcome	Number of studies (K)	Number of participants (n)	Effect size (SMD; 95% CI) and p*	Heterogeneity χ^2 (p)	Heterogeneity I^2	Quality of evidence (GRADE)
Vocational functioning						
Employment Rate	11	967	**0.41** (0.10-0.72) P < 0.01	χ^2: 64.87 (p < 0.01)	85%	Low [2b]
Hours Worked	6	491	**0.31** (0.04-0.58) P < 0.05	χ^2: 17.55 (p < 0.01)	72%	Low [b, e]
Job Duration (weeks)	6	399	**0.48** (0.30-0.67) P < 0.01	χ^2: 6.91 (p = 0.23)	28%	High
Wages	5	340	0.25 (-0.07-0.58) P = 0.13	χ^2: 19.30 (p < 0.01)	79%	Very Low [2b, d]
Work/Education Quality	4	248	**0.76** (0.15-1.36) P < 0.05	χ^2: 28.26 (p < 0.01)	89%	Very low [a, 2b, 2d]
Social functioning						
Social Skills	5	339	**0.24** (0.10-0.38) P < 0.01	χ^2: 3.89 (p = 0.42)	0%	Low [a, d]
Relationships	4	251	0.07 (-0.18-0.33) P = 0.58	χ^2: 4.34 (p = 0.23)	31%	Low [a, d]
Community functioning						
Social and Occupational Functioning	7	459	0.06 (-0.09-0.22) P = 0.43	χ^2: 2.22 (p = 0.90)	0%	Moderate [a]
Independent/Daily Life Functioning	4	284	0.22 (-0.04-0.48) P = 0.10	χ^2: 6.65 (p = 0.08)	55%	Very low [2a, b, d, e]
Role Adjustment and Performance	1	60	-0.14 (-0.64-0.36) P = 0.59	Not Applicable	Not Applicable	Very low [a, 2d]
Cognitive functioning						
Global Cognition	9	565	**0.31** (0.17-0.45) P < 0.01	χ^2: 5.25 (p = 0.73)	0%	High

Beste resultaten: integreren doelen PR en CR

Conclusies

- CR kan het effect van IPS versterken, voor mensen met cognitieve klachten, op verschillende uitkomsten rond werk en opleiding:
  - Job duration
  - Employment rate
  - Hours worked
- Dit effect is vooral zichtbaar:
  - Op de langere termijn
- Ook positief effect op *subjectief* cognitief functioneren, *empowerment* en *executief* functioneren
- Versterken IPS met CR is goed toepasbaar in dagelijkse praktijk
  - 2 sessies per week
  - Tailoring CR therapeut
- Effect ook zichtbaar in andere groepen
  - Doelen PR en CR integreren

Nalezen

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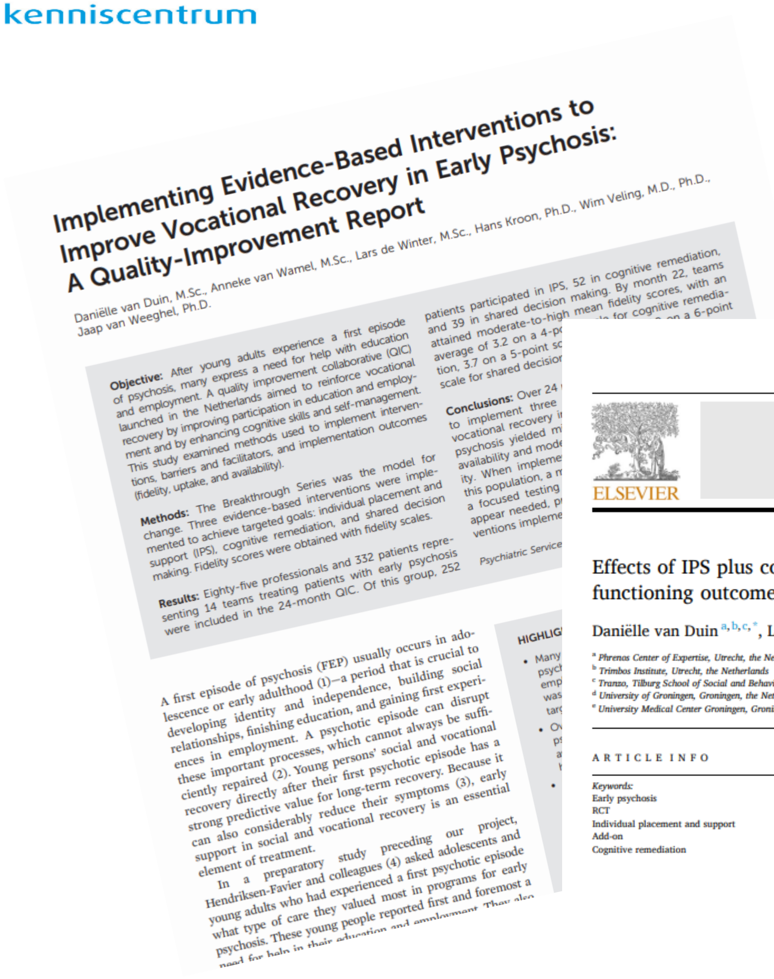
Implementing Evidence-Based Interventions to Improve Vocational Recovery in Early Psychosis: A Quality-Improvement Report

Daniëlle van Duin, M.Sc., Anneke van Wamel, M.Sc., Lars de Winter, M.Sc., Hans Kroon, Ph.D., Wim Veling, M.D., Ph.D., Jaap van Weeghel, Ph.D.

Objective: After young adults experience a first episode of psychosis, many express a need for help with education and employment. A quality improvement collaborative (QIC) launched in the Netherlands aimed to reinforce vocational recovery by improving participation in education and employment and by enhancing cognitive skills and self-management. This study examined methods used to implement interventions, barriers and facilitators, and implementation outcomes (fidelity, uptake, and availability).

Methods: The Breakthrough Series was the model for change. Three evidence-based interventions were implemented to achieve targeted goals: individual placement and support (IPS), cognitive remediation, and shared decision making. Fidelity scores were obtained with fidelity scales.

Results: Eighty-five professionals and 332 patients representing 14 teams treating patients with early psychosis were included in the 24-month QIC. Of this group, 252

A first episode of psychosis (FEP) usually occurs in adolescence or early adulthood (1)—a period that is crucial to developing identity and independence, building social relationships, finishing education, and gaining first experiences in employment. A psychotic episode can disrupt these important processes, which cannot always be sufficiently repaired (2). Young persons' social and vocational recovery directly after their first psychotic episode has a strong predictive value for long-term recovery. Because it can also considerably reduce their symptoms (3), early support in social and vocational recovery is an essential element of treatment.

In a preparatory study preceding our project, Hendriksen-Favier and colleagues (4) asked adolescents and young adults who had experienced a first psychotic episode what type of care they valued most in programs for early psychosis. These young people reported first and foremost a


Psychological Medicine

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Review Article

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Key words:
Cognitive skills training; psychiatric rehabilitation; psychotic disorders; real-life functioning; severe mental illness

The effect of rehabilitation combined with cognitive remediation on functioning in persons with severe mental illness: systematic review and meta-analysis

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Abstract

Background. Psychiatric rehabilitation (PR) can improve functioning in people with severe mental illness (SMI), but outcomes are still suboptimal. Cognitive impairments have severe implications for functioning and might reduce the effects of PR. It has been demonstrated that performance in cognitive tests can be improved by cognitive remediation (CR). However, there is no consistent evidence that CR as a stand-alone intervention leads to improvements in real-life functioning. The present study investigated whether a combination of CR enhances the effect of a stand-alone PR or CR intervention on separate domains


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ELSEVIER

Effects of IPS plus cognitive remediation in early psychosis: 18-month functioning outcomes of a randomized controlled trial

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ARTICLE INFO

Keywords:
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ABSTRACT

Background: After a first episode of psychosis, cognitive impairments present an important barrier to successful (re-)entry into work and education. We assessed whether cognitive remediation (CR) as an add-on to Individual Placement and Support (IPS) can improve participation in regular employment and education.
Method: Participants with early psychosis ($N = 73$) were randomly assigned to receive IPS supplemented with computerized CR, or IPS plus an active control intervention (computer games). The primary outcome was the number of hours spent in competitive employment or regular education, which was assessed every month during the 18-month study period. Secondary outcomes included employment rate, cognitive functioning, mental health (assessed at baseline, 6 and 18 months), and job duration (assessed after 18 months). Both patients and assessors were blind to treatment.
Results: Participants receiving IPS + CR showed greater improvement of competitive employment over time in terms of hours worked (during follow-up period: 38.5 vs. 19.6 h, $B = 2.94$; Wald $\chi^2 = 5.39$; $P = .02$) and employment rate (at T2: 62.1% vs. 25.9%, $\chi^2 = 7.39$; $df = 1$; $P = .008$), compared with the IPS + control group, particularly in the longer term. The number of hours spent in regular education was lower in the IPS + CR group, with more participants having ended education for a positive reason. There was a significant beneficial effect of adjunctive CR for executive functioning, subjective cognitive functioning, and empowerment.
Conclusions: Augmenting IPS with CR has a significant impact on competitive employment in people with early psychosis, with beneficial effects being more pronounced after 18 months.

1. Introduction

People who experienced a first episode of psychosis often have poor employment outcomes (Cougnard et al., 2009; Bertelsen et al., 2008). Completing education and having access to employment are critical aspects toward recovery for this group (Rinaldi et al., 2010a). Employment provides structure, purpose, financial independence, inclusion, self-esteem, and social status (Drake et al., 2013). Besides these substantial personal merits, competitive work in people with psychosis is of great value for society: Loss of productivity due to unemployment ($21.6 billion in the US in 2002) is the factor that contributes most to the

employment can help people with severe mental illness to obtain competitive employment, in a job they prefer, with the level of professional help they need (Bond et al., 2001). In people who recently experienced a first psychosis, success rates of IPS vary from 40 to 65% for enrollment in competitive employment and from 20 to 30% in regular education (Killackey et al., 2008; Rinaldi et al., 2010b). Despite the beneficial effects of IPS for people with early psychosis, they encounter many barriers to successful (re-)entry into work and education, such as low self-esteem, stigma, and sedation and weight gain due to medication (Bassett et al., 2001). Another major barrier is the occurrence of cognitive deficits, such as reduced verbal and visual memory, attention,

Veel dank!

GGz Breburg

GGZ Oost Brabant

mentrum

Pro Persona
voor een gezonde geest

Mondriaan
voor geestelijke gezondheid

umcg

GGNet

ggz Drenthe
geestelijke gezondheidszorg

Dijk en Duin
specialist in psychiatrie

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Vragen of opmerkingen?

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