

Psychological treatment of panic through the internet www.interapy.nl

University of Amsterdam:

- Prof. Dr Alfred Lange
- Prof. Dr Paul Emmelkamp

Interapy

- Drs. Bart Schrieken
- Drs. Jeroen Ruwaard
- Drs. Janneke Broeksteeg

Background: What has been investigated in RCT's?

- **Posttraumatic stress¹**
 - **General**
 - **Sexual traumatised adolescents, in preparation**
- **Burnout/ work-related stress²**
- **Depression³**
- **Panic Disorder and Agoraphobia⁴**
- **Bulimia Nervosa**

¹ Lange et al. (2003). *Journal of Consulting and Clinical Psychology*, 71(5), 901-909

² Ruwaard et al. (2007, in press). *Cognitive Behaviour Therapy*

³ Lange et al. (2005). *Directieve Therapie*, 25(1), 27-50

⁴ Lange et al. (2007). *Directieve Therapie*, 27(2), 73-105

Therapists

- **Junior clinical psychologists**
- **Trained in Cognitive Behavioral Therapy**
- **Training specific Interapy treatments**
- **Weekly supervision**

Exclusion criteria: general

- **Extreme psychopathology**

- Psychosis Psychosis List, PL
- Dissociation Somatic Dissociation Questionnaire,SDQ
- Suicidality Suicide-Risk-List
- Bipolarity

- **Medication**

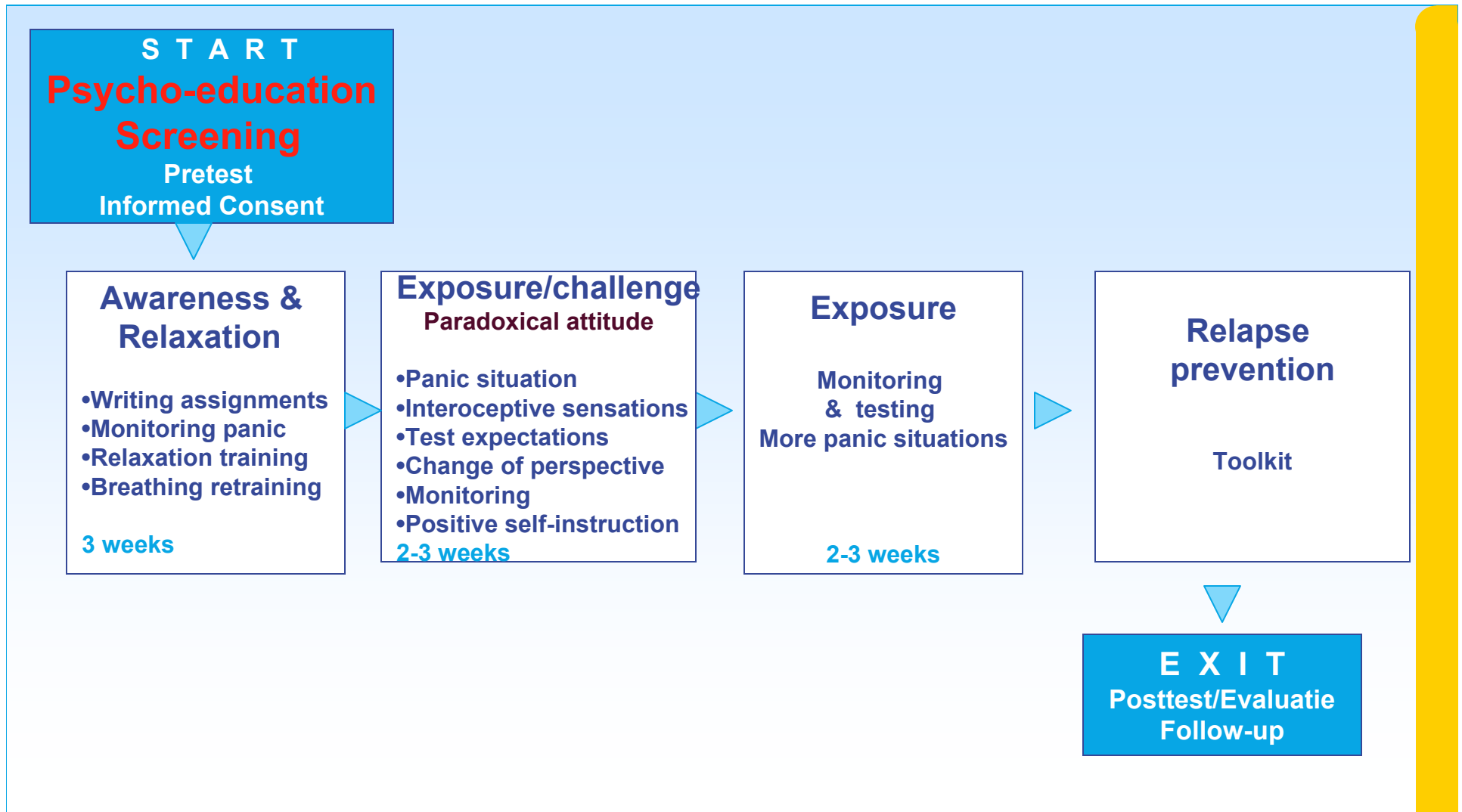
- neuroleptica

- **Drugs / alcohol abuse**

- **Another prevailing disorder**

- **Age: < 16 year**

Modules Interapy Panic Treatment duration: 11 weeks



Treatment of clinical & subclinical Panic Disorder

Results

Randomized trial Interapy panic treatment

- **Recruitment: Interview Nationwide Popular Newspaper**
- **164 applicants**
- **54 did not complete the screening or no Informed Consent**
- **52 excluded after screening**
 - **Prevalent other disorder: Social Phobia, GAS, PTSD, Bipolar**
 - **Organic Factors**
 - **Risk factors: Dissociation, Suicidal ideation**
 - **Present other treatment**
- **58 randomized to the experimental condition:**
 - **80% female; Average age: 39 yrs**
 - **27 treatment; 3 dropouts**
 - **31 psycho-education only**
 - **No difference as to symptomatology between the experimental conditions**
 - **2 Drop outs in active treatment; Psycho-education: 1 Drop out**
- **11 therapists: 10 female; 1 male**

Number of attacks first week vs last week
Treatment (n=27) and Psycho-education (n=31)
Intention to treat analyses



Between effects

Number: $d = .8$; $F = 10.4$ ($p < .002$)

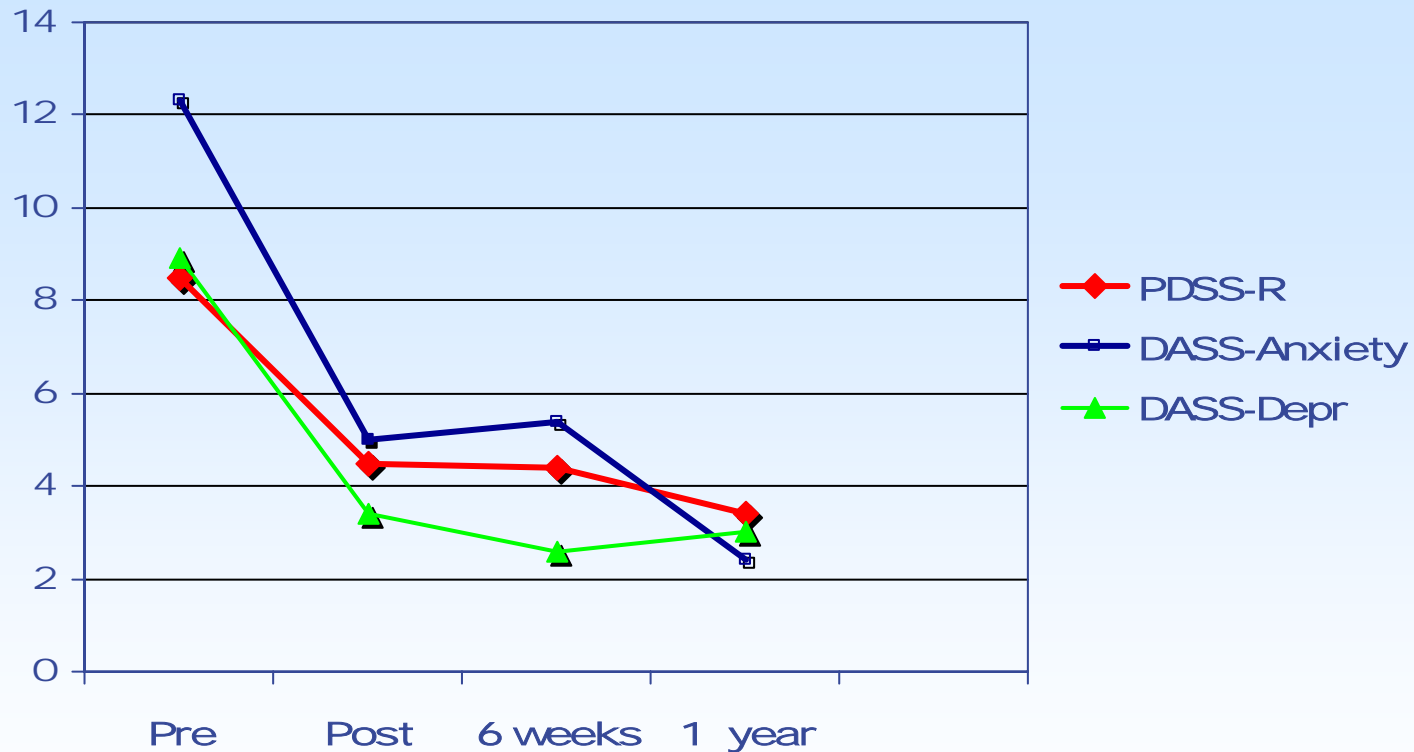
Intensity: $d = 1.4$; $F = 14.6$ ($p < .001$)

Means, T-values, Ancovas, effect sizes active treatment (n=27) and psycho-education (n=31)
Intention to treat analyses

<u>Measures</u>	<u>Condition</u>	Mean Pre-test	Mean Post-test	Cohen's d	F (1.51)
PDSS-SR	Active treatment	9.0	5.9	0.6	7.3**
	Psycho-education	9.4	8.4	0.2	
DASS anxiety	Active treatment	11.8	6.7	0.9	8.8**
	Psycho-education	14.2	12.9	0.1	
DASS depression	Active treatment	9.5	3.9	0.9	9.5**
	Psycho-education	8.6	8.3	0.0	

*p<.05; ** p<.01

6 week Follow-up, pooled data



Effect sizes

- $d = 1.0$ (PDSS-SR)
- $d = 1.1$ (DASS-anxiety & DASS-depr)

Clinical & reliable significances intention to treat

- **Active treatment**

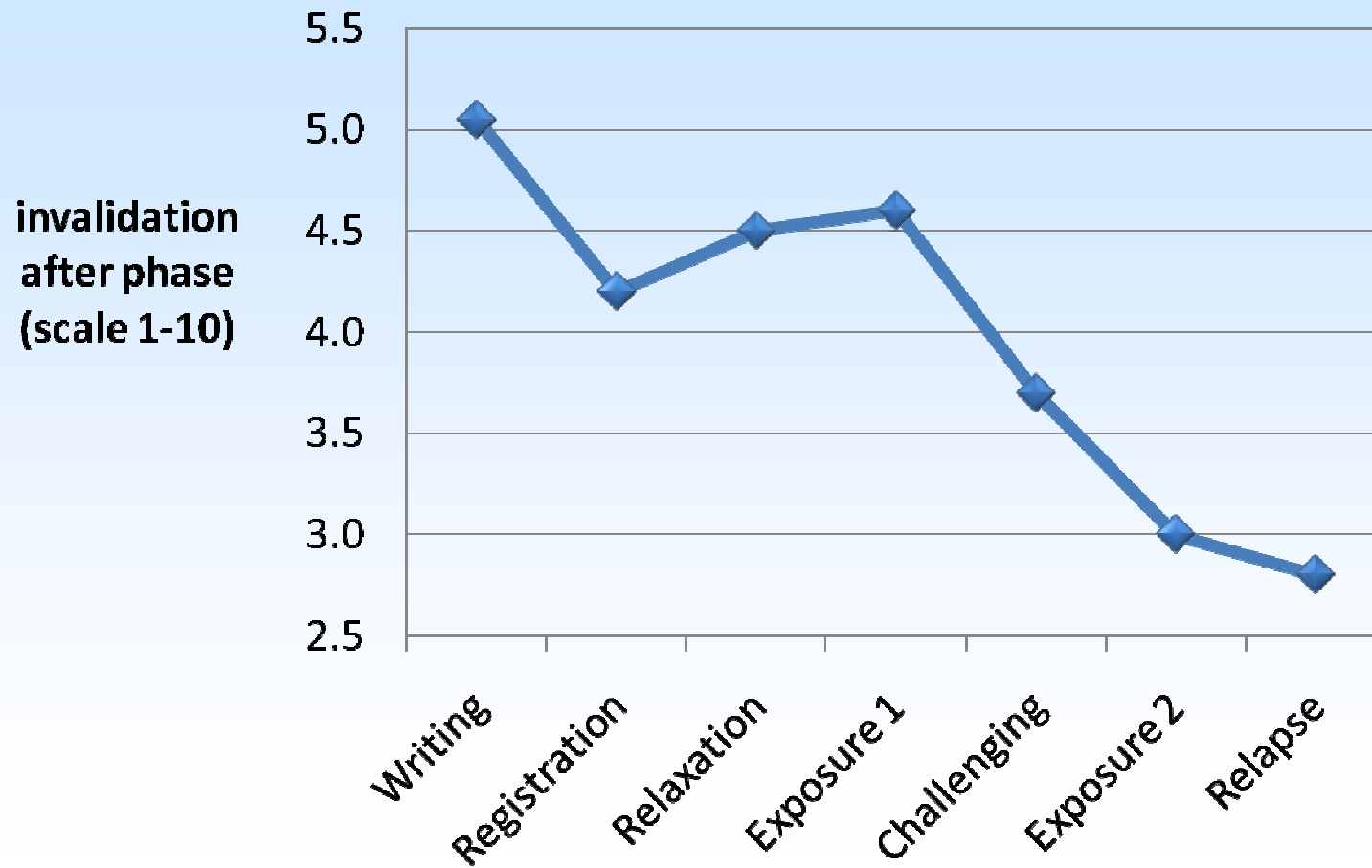
- 47% clinical & reliable improvement on PDSS-SR
- 75% responders (> 50% reduction attacks)
- 38 % total recovery: zero panic attack

- **Psycho-education**

- 12 % clinical & reliable improvement on PDSS-SR
- 19% responders
- 0% total recovery

* Lange et al. (2007). *Directieve Therapie*, 27(2), 73-105.

*After each module!
How much did your panick attacks interfere
with your everyday life?*



Subjective Evaluation of the Modules (n = 42)

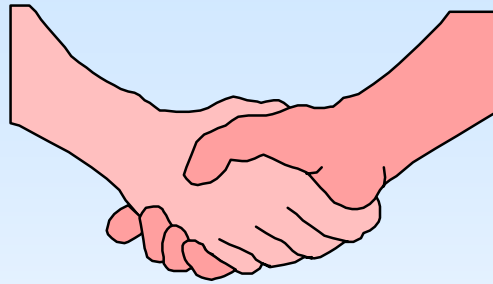
(Scale 0-10)

<u>Intervention</u>	<u>M</u>	<u>SD</u>
Relapse prevention	9.0	1.3
Relaxation exercises	9.0	1.3
Challenging dysfunctional thoughts	8.7	1.3
Awareness: writing assignments	8.5	1.2
Awareness: monitoring	8.0	3.0
Exposure - Reduction avoidance	8.0	1.6
Exposure - Fearful Cognitions	8.0	1.6
<i>All Modules</i>	8.5	

Discussion

- **Generalizability among therapists**
- **Relatively unexperienced**
- **Relative low drop out in the later studies: we improved**
- **Pre-conditions for the effectivity:**
 - Careful Screening
 - Intelligent Protocol
 - Many Motivating techniques
 - Strong Stable Structure (≠ e-mail)
- **Rich database:**
 - Time series research: impact of separate modules
 - Predictor analyses
- **Coming RCT's**
 - Bulimia
 - Stepped care
 - Sexual abuse in adolescents

Time for comments & questions???



www.interapy.nl

www.alfredlange.nl

Interapy: the principles

- Evidence based
- Fully web-based; **not e-mail**
- Transparency
- Personal
- Emphasis Working Alliance
- Feedback therapists one working day

General features

Online psycho-education

Diagnostic screening

- Online results / referrals

Protocolled treatment

- Step by step

Systematic assessment of outcome

- Pre - Post - Follow-up 1 - Longterm follow-up 2
- Validated measures

Systematic evaluation of the modules

Psycho-education **WEG**

- **Symptoms**
- **Treatment possibilities**
- **Principles of treatment**
 - **Active own role**
- **Interapy procedures**

Online measure



11	Ik heb geprobeerd er niet over te praten.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Niet	Zelden	Soms	Vaak
		<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
12	Beelden ervan schoten me in de gedachten.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Niet	Zelden	Soms	Vaak
13	Andere dingen deden me er ste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Niet	Zelden	Soms	Vaak
14	Ik merkte dat ik me gedroeg of dat ik me voelde zoals toentertijd.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
		Niet	Zelden	Soms	Vaak
15	Ik kon moeilijk in slaap vallen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
		Niet	Zelden	Soms	Vaak
16	Ik wist dat ik er nog heel wat gevoelens over had, maar hield er geen rekening mee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Niet	Zelden	Soms	Vaak



Psycho-educatie voorbeeld stress symptomen



The screenshot shows the Interapy website in a Microsoft Internet Explorer browser window. The page title is "Stress: symptomen". The navigation menu includes HOME, BEHANDELINGEN, OVER INTERAPY, MAGAZINE, and CONTACT. A search bar is labeled "ZOEKEN:". The main content area is divided into sections: "STRESS" (with sub-sections "deelnemers" and "professionals"), "BURNOUT", "Herbeleving", and "Vermijding". A quote from a user is displayed: "Ik geloof niet dat therapie mij kan helpen, maar misschien dat Interapy uitkomst biedt." Below the quote is a link: "Ik meld me voor een behandeling van Stress door Schokkende Ervaringen". The footer of the browser window shows the Start button, taskbar with various applications (Inbox, Screens..., Intera..., Docum..., Micros...), and system tray with the time 09:59.

interapy

•STRESS
•deelnemers
•professionals
•BURNOUT

Stress: symptomen

De belangrijkste symptomen na schokkende gebeurtenissen zijn: Herbeleving, Vermijding en Verhoogde Prikkelbaarheid met concentratiestoornissen. Het aantal symptomen en de mate en duur waarin iemand er last van heeft, verschilt van persoon tot persoon en van gebeurtenis tot gebeurtenis.

Herbeleving
Een nare herinnering dringt zich onaangekondigd aan je op. Als in een levensechte film beleef je de gebeurtenis opnieuw, compleet met gedachten en gevoelens van het oorspronkelijke moment. Je schrikt enorm van signalen uit je omgeving die doen denken aan de schokkende gebeurtenis. Als je bijvoorbeeld van een dokter hebt gehoord dat je ernstig ziek bent, kun je van streek raken als je een man in een witte jas ziet, of als je langs het bordje 'Hospitaal' rijdt. Nachmerries zijn een andere bekende vorm van herbeleving. Een belangrijk kenmerk ervan is het gevoel dat je de opdringende beelden of gedachten niet onder controle hebt.

Vermijding
Pijnlijke herinneringen kunnen worden opgeroepen door voorwerpen, personen of situaties die te maken hebben met wat je meemaakte. Bij het zien van een bepaald kledingstuk bijvoorbeeld, bij verhalen van de televisie of de krant, of door ruiken van een geur (brandlucht) komen plots de pijnlijkste herinneringen boven. Om deze pijn te voorkómen, zul je sommige plaatsen of situaties gaan mijden. Zo ontstaat angst voor dagelijkse dingen die te maken hebben met de schokkende gebeurtenis. Het gevolg is dat je normale leefomgeving bedreigend, onveilig wordt. Je raakt beperkt in je bewegingsvrijheid. Als je bijvoorbeeld tijdens een vergadering ernstig bent beledigd, heb je voorlopig even geen zin in vergaderen. Die tegenzin kan uitgroeien tot angst.

'Ik geloof niet dat therapie mij kan helpen, maar misschien dat Interapy uitkomst biedt.'

[Ik meld me voor een behandeling van Stress door Schokkende Ervaringen](#)

interapy

Done

Start | [Taskbar icons] | Internet | 09:59

*Monitored number/intensity of panic attacks
Treatment (n=27) and Psycho-education (n=27)
Intention to treat analyses**

<u>Measures</u>	<u>Condition</u>	Mean Pre-test	Mean Post- test	Cohen's d	F
Number panic attack	Active treatment	4.3	1.6	1.0	10.4*
	Psycho- education	3.6	3.3	0.1	
Intensity panic attack	Active treatment	4.9	2.7	1.3	14.6**
	Psycho- education	4.6	4.8	0.1	

* p<.01; **p<.001

Near future

- **Continuation naturalistic study**
- **Implementing screening tool & standard outcome measures in f2f mental health (GGz-6)**
- **Direct comparison f2f vs internet**
- **Development & tests of new protocols**
 - **Bulimia nervosa**
 - **Sexually traumatised adolescents**
 - **Impact of stepped care first module**
 - **Sleeping problems**
 - **Child rearing**
 - **Self control in couples**

RCT: Subjective Evaluation

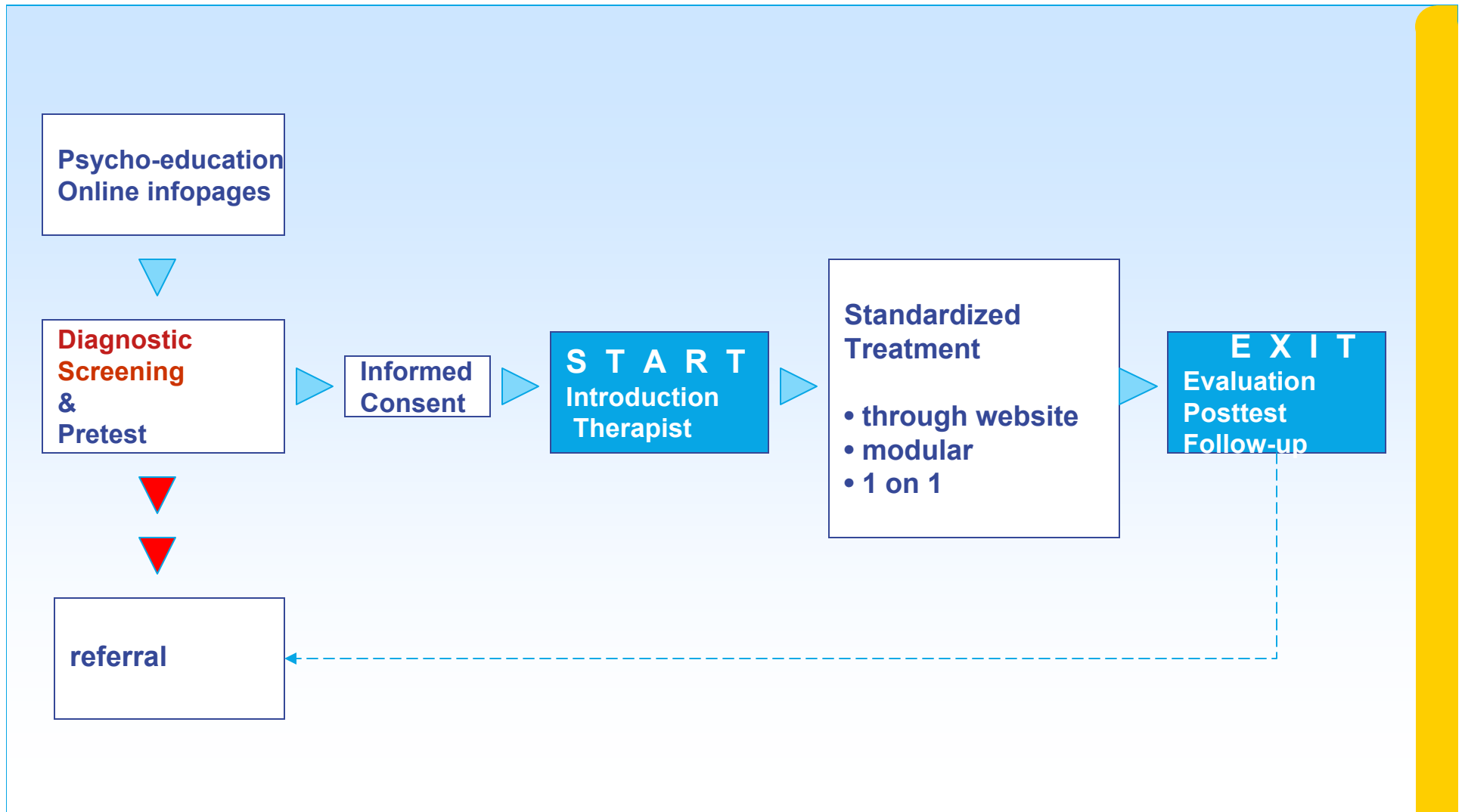
Evaluation of contact (n =42) WEG

Were the instructions clear?	Yes	95
	No	3
Would you recommend the therapy to others?	Yes	98
	No	2
How did you see the contact with your therapist?	Personal	81
	Impersonal	2
Did you miss face-to-face talks with your therapist?	Yes	30
	No	60
How did you like it to be in this way in therapy instead face-to-face?	Pleasant	93
	Unpleasant	2
If you take the whole therapy together, do you find the therapy comprehensible?	Yes	91
	No	7
Do you find the interapy treatment an effective way to reduce fear?	Yes	93
	No	2
To what extent did the treatment initiate a reduction of complaints?	Not at all	0
	A bit	23
	Quite a lot	49
	Much	26

Homepage www.interapy.nl

The screenshot shows the homepage of Interapy.nl in a Microsoft Internet Explorer browser window. The browser's address bar displays 'http://www.interapy.nl/Public2/'. The website features a blue and yellow color scheme. At the top, there is a navigation menu with links for HOME, BEHANDELINGEN, OVER INTERAPY, MAGAZINE, and CONTACT, along with a search bar labeled 'ZOEKEN:'. The main content area is divided into several sections. On the left, a yellow sidebar lists 'BEHANDELING' with sub-points: 'SCHOKKENDE ERVARING', 'BURN-OUT', and 'DEPRESSIE'. Below this, there are links for 'Languages' and 'Disclaimer'. The main text area starts with a welcome message: 'Welkom bij Interapy' and 'Interapy biedt professionele één op één begeleiding bij het verminderen van stress door een schokkende ervaring en/of bij het zelf oplossen van burn-out klachten.' It then explains 'Wat is Interapy?' and 'U kunt hier informatie vinden over:'. A large image of a woman's face is featured on the right, with a quote: 'Interapy heeft mij geholpen definitief een punt te zetten achter een moeilijke periode.'

Procedure WEG



General Principles of treatment

WEG

- **Active own role**
- **The power of behavior change: self-esteem**
- **Increase social skills**
- **Monitoring / writing**
- **Cognitive reappraisal**
- **Self-confrontation / exposure**
- **Emphasis on motivation and alliance**

Clinical & reliable significances intention to treat

- **PDSS-SR:**

- Active treatment: 47 % clinical significant & reliable improved
- Psycho-education only: 12% clinical significant & reliable improved ($p < .001$) (odds ratio 1 : 6)

- **Panic attacks**

- Active treatment: 75% reduction to less than half
- Psycho-education only: 19% reduction to less than half
- Total recovery (no attacks):
 - 38% in Active treatment
 - 0% in Psycho-education only

* Lange et al. (2007). *Directieve Therapie*, 27(2), 73-105.

Subjective Evaluation

Evaluation of contact (n = 42) **WEG**

(scale of 0-10)

	<u>M</u>	<u>SD</u>
Therapist	8.7	1.3
Contact: general	8.5	1.1
<i>Impact treatment : big</i>	92 %	
<i>Advise treatment to others: Yes</i>	98 %	

What has been done?

- Posttraumatic stress¹
 - General
 - Sexual traumatised adolescents
- Burnout/ work-related stress²
- Depression³
- Panic Disorder and Agoraphobia⁴
- Bulimia Nervosa
- Screening tool / Traffic light: Dutch Railways
- Stepped care: Health care-Zeeland
- Naturalistic study of 1000 treatments

¹ Lange et al. (2003). *Journal of Consulting and Clinical Psychology*, 71(5), 901-909

² Ruwaard et al. (2007, in press). *Cognitive Behaviour Therapy*

³ Lange et al. (2005). *Directieve Therapie*, 25(1), 27-50

⁴ Lange et al. (2007, in press). *Directieve Therapie*, 27(2).