1-session treatment of specific phobias

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Lifetime prevalence (%)  
(DSM-IV diagnoses, USA)  

- Specific phobias 12.5  
- Social phobia 12.1  
- Posttraumatic stress disorder 6.8  
- Generalized anxiety disorder 5.7  
- Panic disorder ± agoraphobia 4.7  
- Obsessive-compulsive disorder 1.6  
- Agoraphobia without panic 1.4  
- Separation anxiety disorder 5.2  
- Any anxiety disorder 28.8
Specific phobias

- **Marked and persistent fear that is excessive or unreasonable**, cued by the presence or anticipation of a specific object or situation (e.g. flying, heights, animals, blood).

- **Types** of specific phobias:
  - **Animals** (e.g. spiders, snakes, dogs, birds)
  - **Natural environment** (e.g. heights, storms, water)
  - **Blood-injection-injury** (e.g. surgery, vaccinations)
  - **Situational** (e.g. airplanes, elevators, enclosed places)
  - **Other** (e.g. choking, vomiting, contracting an illness)
CBT model of specific phobias

• Patients with specific phobias have various catastrophic beliefs of what encountering the phobic object/situation would lead to
• The strong belief in the probability of the disaster maintains the avoidance/escape
• This prevents the patient from obtaining new information that can correct the false belief

Thus the phobia remains unchanged!
The 1-session treatment

- Brief cognitive-behavior analysis
- Rationale for the treatment
- Differences between the 1-S treatment and natural encounters with the phobic situation
- Pre-treatment instructions
- The actual treatment
- Goals for the 1-session treatment
- The therapist-patient relationship
Brief cognitive-behavior analysis

• Let the patient *imagine* being in the worst phobic situation and not being able to escape

• What is the *worst consequence* he/she thinks will occur as a result of the encounter

• Let the patient rate (0-100%) *how convinced* he/she is about this outcome when in the phobic situation, having strong anxiety

• Let the patient rate the conviction when sitting in the therapist’s office talking rationally
Brief CBT analysis: snake phobia

T: What is the worst thing you fear will happen when you encounter a snake?
P: I don’t know. I’ll scream and run away.
T: Imagine that you cannot leave the situation.
P: I would freeze and just stare at the snake.
T: What do you think that the snake would do?
P: Sooner or later it would crawl up to me, up my legs, underneath my clothes and bite me.
T: What would happen with you then?
P: I would die.
T: How would you die?
P: From the snake’s venom.
T: But if it isn’t a venomous snake?
P: From the shock. My heart would not stand it.
T: OK. The worst that you imagine could happen is that you will die. How convinced are you (0-100%) in the situation, when you are in contact with the snake, that it will lead to your death?
P: 100%.
T: And how convinced are you now when you are sitting here talking rationally to me about it?
P: 30%
Example: claustrophobia

T: What do you think will happen if you ride a lift?
P: The lift would get stuck between two floors.
T: What would happen with you then?
P: I would get a very strong panic attack.
T: What would happen then?
P: Probably nothing more would happen in my life.
T: What do you mean?
P: I would be ready for the mental hospital and remain there for the rest of my life.
T: You mean then that you would get...

P: Crazy, nuts, insane.

T: OK. Imagine the situation that you ride a lift and it gets stuck. How certain (0-100%) are you when you are in the situation that it will lead to you being admitted to a mental hospital and remaining there for the rest of your life?

P: Completely certain.

T: 100%?

P: No, say 99% then.

T: And now when you are sitting here talking to me?

P: 95%
Brief cognitive-behavior analysis

- Normalize the patient’s phobic behavior:
  - Since you believe so strongly in the catastrophe it is logical to avoid/escape the phobic situation
  - This prevents you from obtaining new information that can correct the false belief
  - Thus, the phobia remains unchanged!
Rationale for the treatment

• Tailor the description of the treatment to the individual patient’s problem behaviors.
• The purpose of the 1-session treatment is to expose the patient to the phobic situation in a controlled way.
• The one-session treatment should be seen as a start of something that the patient should continue is his/her own.
Differences between the 1-session treatment and natural encounters

Natural encounters
• Unplanned
• Ungraded
• Uncontrolled
• Very brief
• Patient alone

Therapy situation
• Planned
• Graded
• Controlled
• Prolonged
• Team-work
The anxiety curve

- Catastrophe
- What the patient fears will happen
- Escape
- What the therapist predicts will happen

Anxiety level

Time

Exp. starts

ends
Pre-treatment instructions

• The treatment is done as a *team-work*
• The therapist will never do anything unplanned in the therapy situation:
  – Description
  – Demonstration
  – Permission to do it
• A high level of anxiety is not a goal in itself
• The treatment will not break the patient’s “personal record” of anxiety
Exposure in-vivo

- The exposure is set up as *behavioral tests* of the patient’s catastrophic cognitions
- The patient makes a *commitment* to remain in the situation until the anxiety fades away
- The patient is encouraged to *approach* the phobic stimulus and to *remain* in contact with it until the anxiety has decreased
- The therapy session is not ended until the anxiety level has been *reduced* with at least 50%, or completely *vanished*
Participant modeling

• The therapist first demonstrates how to interact with the phobic object
• The therapist helps the patient gradually to approximate physical contact with the phobic object
• The patient interacts with the animal on his/her own, only with the help of the therapist’s instructions
Goals for the 1-session treatment

• What the patient should be able to manage in *natural situations* after completing the treatment.

• What the therapist wants the patient to achieve during the *therapy session*
The therapist-patient relationship

• A good working alliance is necessary but not sufficient for a good treatment outcome
• The therapist has the largest responsibility for creating a good relationship
• This work starts during the screening interview and continues during the entire therapy session and into the maintenance phase
The therapist-patient relationship

• The team-work principle
  – Combination of expert knowledge
  – Both parties work equally hard
  – Open and honest communication

• Use of humor during the session
  – Laughing with, not at, the patient

• Use of physical contact in the session
  – Comforting, reducing anxiety
Examples of relationship creating steps

• Always taking the patient’s problems seriously
• Answering the questions that the patient has in an honest way
• Giving factual information about phobias
• Suggesting exposure tasks as close to the patient’s current limit as possible
• Be generous with positive reinforcement
• Never fail the patient’s confidence in the therapist
### Which specific phobias?

<table>
<thead>
<tr>
<th>Animal phobias</th>
<th>Other specific phobias</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Spider</em></td>
<td><em>Blood-injury</em></td>
</tr>
<tr>
<td><em>Snake</em></td>
<td><em>Injection</em></td>
</tr>
<tr>
<td><em>Bird</em></td>
<td><em>Flying</em></td>
</tr>
<tr>
<td><em>Rat</em></td>
<td><em>Claustrophobia</em></td>
</tr>
<tr>
<td><em>Cat</em></td>
<td><em>Dental</em></td>
</tr>
<tr>
<td><em>Dog</em></td>
<td><em>Height</em></td>
</tr>
<tr>
<td><em>Wasp</em></td>
<td><em>Vomiting</em></td>
</tr>
<tr>
<td><em>Frog</em></td>
<td><em>Deep water, etc.</em></td>
</tr>
<tr>
<td><em>Snail</em></td>
<td></td>
</tr>
<tr>
<td><em>Worm</em></td>
<td></td>
</tr>
<tr>
<td><em>Ant</em></td>
<td></td>
</tr>
<tr>
<td><em>Insect</em></td>
<td></td>
</tr>
<tr>
<td><em>Hedgehog</em></td>
<td></td>
</tr>
<tr>
<td><em>Lizard</em></td>
<td></td>
</tr>
</tbody>
</table>
Which specific phobics?

- The phobia should be *circumscribed*
- The phobia should *not* entail any *positive consequences*
- Successful treatment should *not* result in any predictable *negative consequences*
- The patient must be *motivated* enough to tolerate a relatively high anxiety level
## Acceptability of 1-session treatment

<table>
<thead>
<tr>
<th>Type of phobia</th>
<th>n</th>
<th>Declining</th>
<th>Dropping out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spider: ind.</td>
<td>27</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Spider: group</td>
<td>58</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Blood-injury</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Injection</td>
<td>48</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Flying</td>
<td>15</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Claustro</td>
<td>15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Snake</td>
<td>50</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Dental</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Various (children)</td>
<td>240</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>493</td>
<td>4 (0.8%)</td>
<td>0</td>
</tr>
</tbody>
</table>
Spider phobia (Öst et al., 1991)

Behavior Approach Test

Self-rating of Anxiety

Assessment

Pre Post 1 yr f-up

Pre Post 1 yr f-up
Spider phobia (Hellström & Öst, 1995)

**Behavior Approach Test**

- 1S
- SC
- GH
- SH
- GC

**Self-rating of Anxiety**

(Hellsström & Öst, 1995)
**Spider phobia (Öst, 1996)**

**Group treatment**

**Behavior Approach Test**

- **Pre**
- **Post**
- **1 yr f-up**

**Self-rating of Anxiety**

- **Pre**
- **Post**
- **1 yr f-up**
Spider phobia (Öst et al., 1997)

Group treatment

Behavior Approach Test

Self-rating of Anxiety

Assessment

Pre
Post
1 yr f-up
Injection phobia (Öst et al., 1992)

**Behavior Approach Test**

**Self-rating of Anxiety**

Assessment:
- Pre
- Post
- 1 yr f-up
Flying phobia (Öst et al., 1997)

Fear of Flying Scale

Flying during behavioral test

Assessment

Pre Post 1 yr

Percent

Post 1 yr

1-S 5-S
Clinically Improved Percent

Cautophobia (Öst et al., 2001)

Behavioral Approach Test
Time in a small locked room
Minutes

Pre-Post 1 year Assessment

E5 CT 5 WLC

Post 1 year Assessment

E1
Dental phobia (Haukebo et al., 2008)

Behavioral Approach Test

Self-rating of anxiety

Pre  Post  1 yr

Assessment

Pre  Post  1 yr

Assessment
**Intra-oral injection phobia**

*(Vika et al., 2009)*

**Behavioral Approach Test**

**Self-rating of anxiety**

(Vika et al., 2009)
Spider phobia
(Andersson et al., 2009)

Behavioral Approach Test

Spider Phobia Q.

Assessment
**Snake phobia**
*(Andersson et al., 2009)*

**Behavioral Approach Test**

**Snake Phobia Q.**
Applied Tension

1. Instruction of the tension technique
   Homework assignment: practice 5 times/day
2. Applying the tension technique while being
3. exposed to slides of wounded people
4. Applying the tension technique while visiting
   the Blood donor center
5. Applying the tension technique while visiting
   the Department of Thoracic Surgery
Maintenance program (e.g. blood donation)
The tension technique

- Tense the arm-, chest-, and leg muscles firmly
- Keep the tension for 15-20 sec (until you feel the warmth rising in your face)
- Release the tension and return to normal but don’t relax
- Pause for 30 sec
- Repeat tension-release-pause 4 times
- Practice 5 times spread across the day
Blood phobia (Öst et al., 1991)
1. Description and modelling of the technique
2. Tension training and assessment of blood pressure at even intervals (for 30 min)
3. Application training - 10 slides
4. Application training with other stimuli, e.g.
   – Pricking fingers, blood in test tube, bandages
5. Home work assignments:
   – Tension training 5 times/day
   – Application training - 10 photos
Blood phobia (Hellström & Öst, 1995)
Different ways of doing exposure

The difference between: nonspecific exposure and specific exposure, based on the individual patient’s catastrophic beliefs
Catastrophic belief

Nonspecific exposure

Specific exposure to test the catastrophic belief

Nonspecific exposure
The difference can explain why

- Some studies using standardised exposure find that up to 20% of the patients are unchanged, despite the fact that they have carried out the entire treatment and all homework assignments.

- 1-session treatment can be done so rapidly (sometimes in 45 min) and yield such good effects, which are maintained, or even better at the follow-up one year later.
Clinically significant improvement and treatment time

<table>
<thead>
<tr>
<th>Type of phobia</th>
<th>Post</th>
<th>F-up</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal</td>
<td>89%</td>
<td>93%</td>
<td>2.1 h</td>
</tr>
<tr>
<td>Blood-injury</td>
<td>90%</td>
<td>100%</td>
<td>2.0</td>
</tr>
<tr>
<td>Injection</td>
<td>80%</td>
<td>90%</td>
<td>2.5</td>
</tr>
<tr>
<td>Flying</td>
<td>93%</td>
<td>64%</td>
<td>3.0</td>
</tr>
<tr>
<td>Claustrophobia</td>
<td>80%</td>
<td>100%</td>
<td>3.0</td>
</tr>
<tr>
<td>Dental</td>
<td>85%</td>
<td>90%</td>
<td>2.5</td>
</tr>
<tr>
<td>Various</td>
<td>78%</td>
<td>82%</td>
<td>3.0</td>
</tr>
</tbody>
</table>

(in children and adolescents)
## Meta-analysis: 1-session studies, overall outcome

<table>
<thead>
<tr>
<th>Study name</th>
<th>Outcome</th>
<th>Statistics for each study</th>
<th>Hedges's g and 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Öst, 1991</td>
<td>Combined</td>
<td>1.472 0.682 2.262</td>
<td></td>
</tr>
<tr>
<td>Öst, 1992</td>
<td>Combined</td>
<td>-0.338 -0.955 0.279</td>
<td></td>
</tr>
<tr>
<td>Hellström, 1995</td>
<td>Combined</td>
<td>1.485 0.490 2.479</td>
<td></td>
</tr>
<tr>
<td>Hellström, 1996</td>
<td>Combined</td>
<td>0.306 -0.539 1.152</td>
<td></td>
</tr>
<tr>
<td>Muris, 1997</td>
<td>Combined</td>
<td>0.151 -0.668 0.969</td>
<td></td>
</tr>
<tr>
<td>Öst, 1997a</td>
<td>Combined</td>
<td>0.653 -0.052 1.358</td>
<td></td>
</tr>
<tr>
<td>Öst, 1997b</td>
<td>Combined</td>
<td>0.234 -0.467 0.934</td>
<td></td>
</tr>
<tr>
<td>Muris, 1998a</td>
<td>Combined</td>
<td>0.933 0.001 1.866</td>
<td></td>
</tr>
<tr>
<td>Muris, 1998b</td>
<td>Combined</td>
<td>1.139 0.157 2.121</td>
<td></td>
</tr>
<tr>
<td>Thom, 2000a</td>
<td>Combined</td>
<td>1.049 0.399 1.699</td>
<td></td>
</tr>
<tr>
<td>Thom, 2000b</td>
<td>Combined</td>
<td>1.031 0.248 1.815</td>
<td></td>
</tr>
<tr>
<td>Heading, 2001a</td>
<td>Combined</td>
<td>0.897 0.127 1.667</td>
<td></td>
</tr>
<tr>
<td>Heading, 2001b</td>
<td>Combined</td>
<td>1.193 0.394 1.991</td>
<td></td>
</tr>
<tr>
<td>Öst, 2001a</td>
<td>Combined</td>
<td>-0.054 -0.897 0.788</td>
<td></td>
</tr>
<tr>
<td>Öst, 2001b</td>
<td>Combined</td>
<td>0.858 0.053 1.662</td>
<td></td>
</tr>
<tr>
<td>Öst, 2001c</td>
<td>Combined</td>
<td>2.428 1.537 3.319</td>
<td></td>
</tr>
<tr>
<td>Brosnan, 2006</td>
<td>Self-report</td>
<td>0.749 -0.034 1.532</td>
<td></td>
</tr>
<tr>
<td>Huey, 2006a</td>
<td>Combined</td>
<td>1.024 -0.227 2.275</td>
<td></td>
</tr>
<tr>
<td>Huey, 2006b</td>
<td>Combined</td>
<td>1.957 0.579 3.334</td>
<td></td>
</tr>
<tr>
<td>Schiøide, 2007</td>
<td>Combined</td>
<td>7.941 5.516 10.366</td>
<td></td>
</tr>
<tr>
<td>Haukebø, 2008</td>
<td>Combined</td>
<td>2.802 1.727 3.877</td>
<td></td>
</tr>
<tr>
<td>Andersson, 2009a</td>
<td>Combined</td>
<td>0.262 -0.475 0.998</td>
<td></td>
</tr>
<tr>
<td>Andersson, 2009b</td>
<td>Combined</td>
<td>0.421 -0.332 1.175</td>
<td></td>
</tr>
<tr>
<td>Leutgeb, 2009</td>
<td>Combined</td>
<td>3.296 2.404 4.188</td>
<td></td>
</tr>
<tr>
<td>Ollendick, 2009a</td>
<td>Combined</td>
<td>0.454 0.134 0.775</td>
<td></td>
</tr>
<tr>
<td>Ollendick, 2009b</td>
<td>Combined</td>
<td>0.673 0.287 1.058</td>
<td></td>
</tr>
</tbody>
</table>

**Hedges's g and 95% CI**

![Graph showing the results of the meta-analysis with Hedges's g and 95% CI](image-url)
Comparison conditions

1-session treatment versus:

- *Wait-list control*
  \[2.13 \text{ (CI } 1.55, 2.70)\] \[z: 7.25\] \[p<0.0001\]

- *Placebo control*
  \[0.85 \text{ (CI } 0.39, 1.31)\] \[z: 3.61\] \[p<0.0001\]

- *Active treatment*
  \[0.81 \text{ (CI } 0.49, 1.12)\] \[z: 4.99\] \[p<0.0001\]
Age groups

- **Adults** (20 studies)
  
  1.04 (CI 0.65, 1.43)  \( z: 5.25 \)  \( p<0.0001 \)

- **Children** (6 studies)
  
  0.88 (CI 0.39, 1.88)  \( z: 3.48 \)  \( p<0.001 \)
• *My own studies*  
  – 11 studies (13 treatment conditions, 313 patients)

• *Studies with some therapist training by me*  
  – 9 studies (10 treatment conditions, 207 patients)

• *Studies with no therapist training by me*  
  – 18 studies (20 conditions, 470 patients)
<table>
<thead>
<tr>
<th>Measure</th>
<th>My own studies (13)</th>
<th>Some therapist training (12)</th>
<th>No therapist training (20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessor</td>
<td>4.18 (1.17)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Self-report</td>
<td>2.41 (1.09)</td>
<td>2.02 (1.05)</td>
<td>2.80 (1.69)</td>
</tr>
<tr>
<td>BAT</td>
<td>3.57 (2.36)</td>
<td>2.66 (0.73)</td>
<td>2.34 (0.97)</td>
</tr>
<tr>
<td>Physiology</td>
<td>0.36 (0.25)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.16 (0.06)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.42 (0.11)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
Conclusions

• The 1-session treatment is a highly acceptable treatment for both children and adults
• It yields clinically significant improvement in 78-93% of the patients, and the effects are maintained, or increased at 1-year follow-up
• The treatment effects have been independently replicated by researchers in Holland, England, Germany, Norway, USA, Canada, Australia, Austria.