Intensified Exposure Therapy for Compulsive Disorders

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Small group exercise at the beginning:

- Which "rituals" do I observe in my everyday life?
- What "superstitions" have I "inherited" from my family?
- Breakout room: 3 persons
- Exchange: 10 minutes

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Everyday compulsive phenomena

- "Magical Thoughts"
- "catchy tune"

- repeated checks before leaving the apartment
- Not remembering a name or a movie title

- Unpleasant intrusive thoughts

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Diagnostic Guidelines according to ICD 10

- repetitive, unpleasant thoughts, ideas, doubts or impulses repeat themselves
- thoughts and impulses are recognizable to the patient as his own
- attempt to resist at least one thought or action, even if unsuccessfully
- thought or action is not experienced as pleasant
- thoughts/actions create impairment and suffering

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Diagnostic Guidelines according to ICD 10

- Predominantly obsessional thoughts or ruminations (F42.0)
- Predominantly compulsive acts [obsessional rituals] (F42.1)
- Mixed obsessional thoughts and acts (F42.2)
- Other obsessive-compulsive disorders (F42.8)
- Obsessive-compulsive disorder, unspecified (F42.9)

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Diagnostic Guidelines according to ICD 11

- 6B20.0 Obsessive-compulsive disorder with fair to good insight
- 6B20.1 Obsessive-compulsive disorder with poor to absent insight
- 6B20.Z Obsessive-compulsive disorder, unspecified

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Obsessive-compulsive spectrum or related disorders

- Body Dysmorphic Disorder
- Trichotillomania
- Skin Picking Disorder
- Hoarding and collecting
- Substance/medication-induced compulsions
- Compulsions with medical cause (z.B. PANS)

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Threat Mode

Cognitive:
Threatening thoughts and expectations regarding contamination, dirt, disease, disaster, self-inflicted dangers for others, moral failure, negative remote effect of own thoughts (magical thinking) etc.

Affective:
Fear, disgust, anger, guilt, shame, sadness, restlessness, hard to differentiate "lumps of emotion", which express themselves as restlessness, emptiness

Defense Mode

Active Avoidance:

Motor:
Wash, wipe, "straighten", checking, undoing, making sure, checking with others, repeating, counting, ritualized movements, etc.

Cognitive:
Pondering, nullifying, in thought. "rewind and replay", counterthoughts, etc.

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Contents of obsessive thoughts

- Aggressive thoughts
- Pollution
- Sexual content
- Collecting and keeping
- Religious
- Symmetry or accuracy
- Relationships

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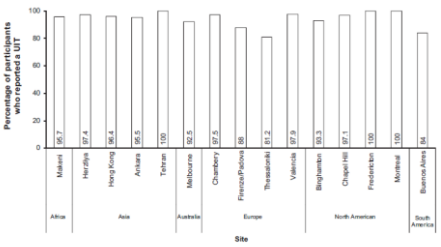

Fig. 1. Percentage of participants at each site who reported at least one UIT within the last three months.

aus: Radomsky, A.S., Alcolado, G.M., Abramowitz, J.S., Alonso, P., Belloch, A., Bouvard, M., Clark, D.A. ... (2014). Part 1 – You can run but you can't hide: Intrusive thoughts on six continents. *Journal of Obsessive-Compulsive and Related Disorders, 3*, 269-279.

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„Compare thoughts of obsessive-compulsive and healthy, you will find no difference!"
P. Salkovskis

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Compulsive acts

- Control
- Wash
- Repeat
- Count
- Arrange
- Collect

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Frequency of specific obsessions and constrictions

Compulsive acts	Frequency
Controlling	63%
Cleaning	60%
Counting	36%
Symmetry	28%
Hoarding	18%

Obsessive thoughts	Frequency
Pollution	45%
Body	36%
Symmetry	31%
Aggressive impulses	28%
Sexual imagination	26%

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Example:
Compulsions while reading a book

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Frequency of obsessive-compulsive disorder

- 1-3% (Finland, India, Hong Kong, Egypt ,Uganda, Turkey, Latin America, USA, etc.)
  → no gender differences
- (Men significantly earlier onset)
- Equal distribution across social classes
- 30% - 40% of parents also have OCD
- high concordance in twins
  - 87% identical twins, 47% fraternal twin
- Onset: approx. 19 Years
- High rates of comorbidities: depression, anxiety disorders, eating disorders

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Some characteristics of obsessive-compulsive disorder

- First symptoms usually before the age of 18, manifestation often between 20 and 25 years of age
- 95% become ill before the age of 40
- compulsive thoughts and/or actions (80 % both)
- → 50 % Chronic course (Skoog et al. 1999, Vissier et al. 2013)
- hardly any spontaneous remission
- strong effects on occupation and social relationships (Kugler et al., 2014)
- low treatment rate, long treatment latency: shame, concealement, not recognized, not inquired !!!! (Stengler et al., *Soc Psychiatry Psychiatr Epidemiol*, 2012, online)

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Diagnostics of obsessive-compulsive disorder

Interview (external rating)

Yale-Brown Obsessiv Compulsive Scale (Y-BOCS)

→ also available in self-rating

Questionnaires

- HZI
- OCI-R
- Padua Inventory
- DOCS
- Florida Inventory
- Maudsley Obsessive-Compulsive Inventory

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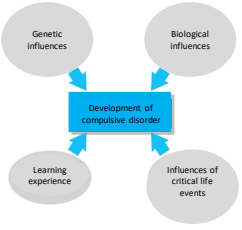
Factors influencing the development of obsessive-compulsive disorder



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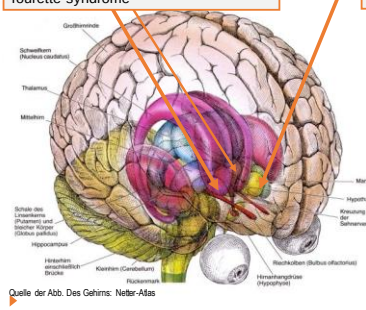
Etiology: Neurobiological factors

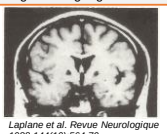
Diseases of the basal ganglia
Chorea minor Sydenham
Postencephalit. Parkinson's syndrome
Tourette syndrome

Stereotactic interventions
in case of therapy resistance



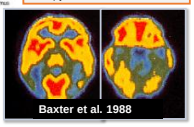
Quelle der Abb. Des Gehirns: Netter-Atlas

Damage basal ganglia



Laplane et al. Revue Neurologique 1988 144(10):564-70

Hypermetabolism
striatum, OFC, reversible after therapy



Baxter et al. 1988

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Neurobiological models

- Serotonin deficiency (imbalance)
- Overactivity in information-processing and behavior-regulating parts of the brain.

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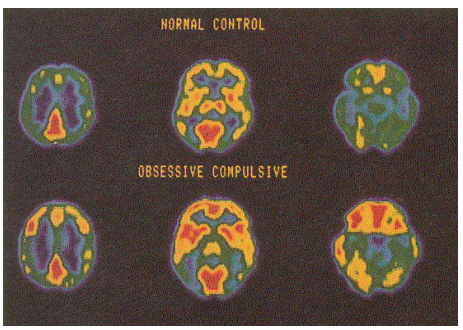
Neuronal hyperactivity in obsessions



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Etiology: Psychological factors

- **Trauma/stressful life events:** Type II trauma 10 - 15% (LaFleur et al. 2011, Real et al.; 2011); stressful life events at about 50%.
- **Personality factors:** anxious, self-insecure, dependent, less often obsessive-compulsive (Thiel et al. 2013).

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Basic models:

- "Puzzle - Metaphor"
- What does it say about me that I have OCD?
- Is there a story behind OCD?
- What is the "Feared Self?" (e.g., Aardema et al., 2019)

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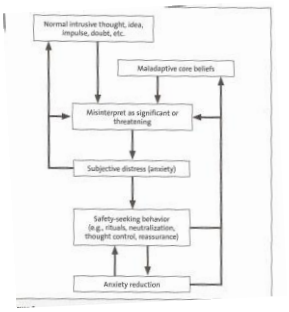

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Distorted cognitive assumptions/schemata

- Excessive sense of responsibility/overestimation of threat/danger.
- Overemphasis on the importance of thoughts, and the need to control them to control
  - Thought-Action-Fusion
  - Thought-Event-Fusion
  - Thought-Object-Fusion
- Perfectionism/intolerance of insecurity

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Learning experiences

- 2 Factor Model (Mowrer)
  → Classical conditioning and operant conditioning
- Model learning
- Learning by proxy
- Often also intermingling learning mechanisms

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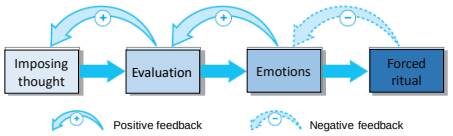
Simplified explanatory model for obsessive-compulsive symptoms



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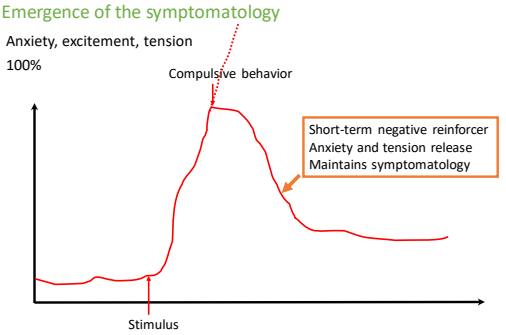
Emergence of the symptomatology



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Treatment

- Cognitive behavioral therapy with exposure therapy with response prevention is the procedure of choice.
- Meta-analyses (e.g., Olatunji et al., 2013) show high treatment effects (d = 0.92); 75%-80% of patients benefit from treatment.
- Nevertheless, relapses and or treatment discontinuations occur frequently(Abramowitz, 1998; Abramowitz & Arch, 2014)

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Behavioral therapy for obsessive-compulsive disorder

- Starting point
- chronic experiences of failure
- doubts about oneself and one's own coping abilities
- despite restrictions, the forced world seems more familiar than the hoped-for alternative
- stressful effects on lifestyle and environment

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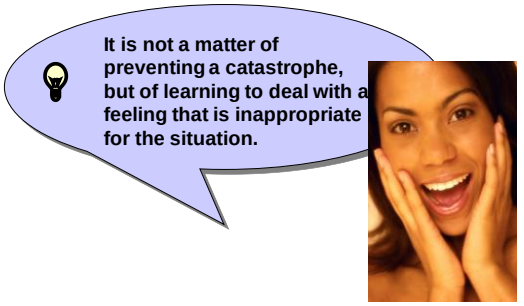
Aim of the therapy:



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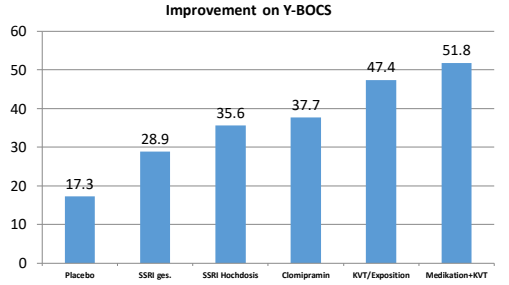
Effectiveness of different forms of therapy



according to Voderholzer & Hohagen 2017

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Psychotherapy for obsessive-compulsive disorder (I)

1. Establishing a therapeutic relationsship
2. Motivational analysis (visions, values)
3. Behavioral analysis: learning history, symptom level (compulsive protocols), functional analysis
4. Goal setting (freedom of choice, flexibility)
5. Development of a plausible etiological model, communication of therapy rationale; hierarchization of the compulsion-triggering situations

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Psychotherapy for OCD

6. therapeutic interventions:
   (graduated) Exposure with response prevention
   - Exposure in therapeutic accompaniment
   - Exposure under own direction

   Processing emotions, cognitive and metacognitive techniques
   → Functionality processing

7. Exposure in the home environment, self-management (video-assisted if necessary).

8. Relapse prevention, mindfulness (adaptive practice, idea: 100% relapse).

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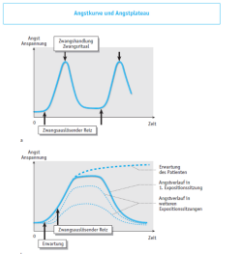
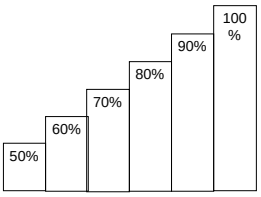
Behavioral therapy for obsessive-compulsive disorder: Symptom-Oriented

• Development of a change plan





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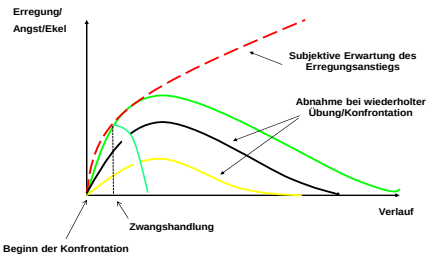
EXPOSURE



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Designing Exposure/basic questions

- How far do you want to go?
- What makes sense? Where are the limits?
- Reasonable risk in exposures
- Distinction between everyday exercises and exposure exercises
- Maxime: I would be able to do the expos.
- Am I a good OCD-therapist?

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Group exercise

Example washing compulsion/contamination fears (e.g. fear of dirt and feces)

Which exercises do I find acceptable?

Group: 3-4 persons

10 minutes

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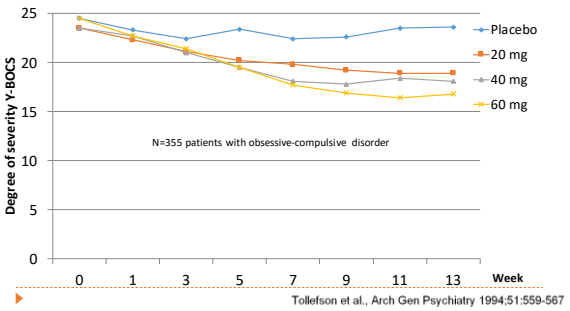
Effect of SSRIs in obsessive-compulsive disorder using fluoxetine as an example.



Tollefson et al., Arch Gen Psychiatry 1994;51:559-567

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Pharmacological agents with proven efficacy in obsessive-compulsive disorder.

- **Fluvoxamin** (Fevarin) - 300 mg:
- **Fluoxetin** (Fluctin) - 80 mg:
- **Paroxetin** (Seroxat) - 60 mg:
- **Sertralin** (Zoloft) - 200 mg:
- **Citalopram** (Cipramil) - 40 mg:
- **Escitalopram** (Cipralex) **- 20 mg:**

„SSRI* “

Clomipramin (Anafranil): single effective tricyclic antidepressant, - 225 mg, very potent serotonin reuptake inhibitor.

•SSRI = selective serotonine reuptake inhibitors

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Psychotherapy for obsessive-compulsive disorder (II)

Therapy of the background conditions

- Functionality of the symptomatology
- Biographical references
- Social competence
- Family/couple interventions
- Social situation school/work

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New developments in therapy

- new concepts of intensified exposure therapy: e.g., Bergen 4-day-treatment (B4DT) (e.g., Launes et al., 2020)
- New therapy interventions for e.g., strong disgust or shame effects (e.g., Imagery Rescripting, Fink et al., 2018)
- Promotion of motivation and reduction of ambivalence (e.g., interventions from CFT, currently Fink-Lamotte & Stierle, in prep)
- Stronger focus on inhibitory learning
- Home treatment
- Intensive Exposure

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How to implement intensified exposure therapy?

- Inpatient vs. Outpatient
- Collaborative Work
- Digital Assistance
- Preparation within therapy
- Adherence: Let's get it on!"

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Mechanisms of Exposure: Initial situation

- For a long time, obsessive-compulsive disorder was considered virtually untreatable.
- It was only in the 1960s that exposure therapy with response prevention significantly improved the therapeutic prognosis
- Meta-analysis by Olatunji et al. (2013) demonstrates efficacy of CBT (d = 0.92)
- However, between 25-50% of patients quit prematurely or experience relapse
  (Abramowitz, 1998; Abramowitz & Arch, 2014)

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Initial situation

- Exposure therapy with response prevention represents the central intervention strategy(Abramovitz, 1996, Foa et al., 2006).
- Theoretical basis: Emotional Processing Theory (Foa & Kozak,1986)

Objectives:
1. Reduction of pathological anxiety associated with compulsively related stimuli (thoughts, objects, etc.).
2. Reduction of avoidance and neutralization behaviors.
3. Extinction via the mechanism of action of habituation during exposure (within treatment habituation) between repeated exercises (between treatment habituation).

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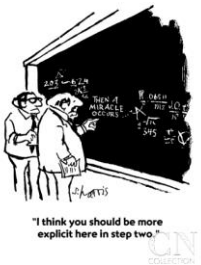
But how does our treatment actually work?



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Theoretical problems of exposure therapy (I)

- Habituation is not a clear predictor of extinction learning and sustained treatment effects (Craske et al., 2012).
- Neurobiological results tend to support inhibition learning: parts of the medial prefrontal cortex seem to inhibit amygdala activation when extinction learning occurs (Milad et al. 2009)
- Fear extinction learning seems to be strongly context bound
- Also unfavorable is the re-occurrence of a US confrontation (e.g. reinstatement, spontaneous recovery, context renewal). In this case, "old" fears often reappear in a fear-relevant context. (Zbozinek et al., 2015).

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Theoretical problems of exposure therapy (II)

- Despite core assumption that habituation is the core mechanism of action of exposure, this is not found empirically!
- Neither the extent of experienced anxiety/SUDS in the exercises nor its decrease is a predictor for therapy success!!!
- This is analogous to Bjork & Bjork's (2006) New Theory of Disuse: Performance during exercises is not a predictor of intensity and goodness of learning.
- Recent developments in learning research: Inhibitory learning = core mechanism of extinction learning (Bouton, 1993; Craske & Hermans, 2013).

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Theoretical problems of exposure therapy (III)

- Could too much focus on anxiety habituation during the exposure phase tend to promote relapse?
- Could cognitive techniques (modification of overestimation of responsibility and low probability thoughts) tend to be reassurance signals?

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Therapeutic approaches

- Inhibitory learning approach:
- The pathologically learned threat association between US and CS remains intact. In parallel, new non-fear-related associations should be learned.
- Goal: Increase the likelihood that "neutral associations" will inhibit access to "danger-related associations" in the long term.
- Additional:
- Experiential Avoidance and general avoidance of unpleasant thoughts and feelings also seems to play a central role Goal: develop more acceptance of this(sensu ACT; Hayes et al., 2012)(Forsyth et al., 2006; Arch & Abramowitz, 2014)

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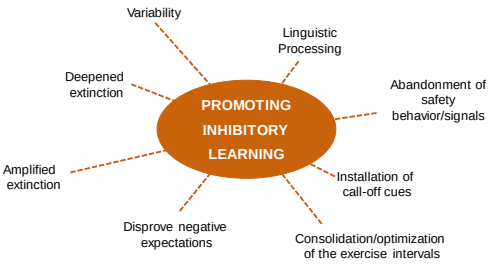
Approaches to compulsory treatment



(Craske et al.,2014)

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Disprove negative expectations

- Work out maximum discrepancy between expected events and actual experience.
- CS is present and the US is not.
- Reduce patient's expectation that the feared event will occur to 5%.
- For this, more and more intensive exposures if necessary
- Questions: What did you learn? To what extent did your fears come true?

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Abandonment of safety behavior and safety signals

- Accurate analysis of mental and motor safety behaviors and neutralizations.
- Repeated instructions to refrain from safety behaviors appear useful
- Acquisition:
- What do you do to make the situation easier to get through?
- Are there any external circumstances that make it easier for you to endure the situation?
- Consider the role of the therapist as a safety signal

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Variability of stimuli and contextual factors

- Goal: improved generalization
- Different locations and settings (time of day, mood, accompaniment vs. no accompaniment, etc.)
- Do not repeat one exercise at a time
- Use mix of methods (in vivo, in sensu)
- "Wild through the constraint hierarchy"
- Spontaneous expos as opportunity/expos as lifestyle (attitude/culture)

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Deepened extinction

- Goal: combination of different fear-inducing stimuli
- when combining different fear stimuli, inhibitory learning is better; combination of exercises is useful
- e.g., first process fear stimuli/situations individually and then combine them
- e.g. combination of in vivo and in sensu exposures

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Linguistic Processing

- Naming affect during expo is helpful (Lieberman, 2011; Tabibnia et al., 2008).
- If applicable, do prompt in expo (log, smartphone, etc.).
- Begin approximately 10s after the start of the expo (Arch & Abramowitz, 2014).

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Consolidation

- Activated memory contents are particularly receptive to corrective experiences
- Activation by e.g. in sensu exercise before an in vivo exercise is performed
- Repetition of exposure exercise after a short period of time
- Optimization of exercise intervals
- Variation and increase of pauses between exposures
- If necessary, high intensity at the beginning and variable and decreasing intensity in the course of therapy and behavior change

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Amplified extinction

- Incorporating surprising moments into the expositions
- Purposefully incorporating unpleasant events
- Anticipate unpleasant events that often lead to recurrence of fear/disgust, etc.

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„Ich hab die Minzbonbons aus dem Wartezimmer geklaut. Das ist das erste Mal, dass jemand was aus einer Therapie mitgenommen hat."
H. Simpson

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Thank you for your attention!