

SMS-feedback helps to support therapy of aversive tension states and tinnitus

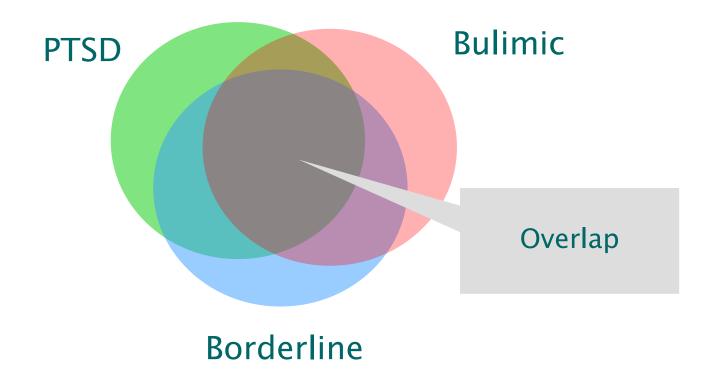
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Background

 Borderline-, post-traumatic-stress-disorder, and bulimic patients typically suffer from aversive tension states



Rational

Aversive Tension State

- Restlessness
- Irritability
- Explosive Anger
- Phases of Inner Emptiness
- Intensive and consistent

Unwanted Behaviour

- Self damaging behaviour
- Binge eating, vomiting
- Risk seeking

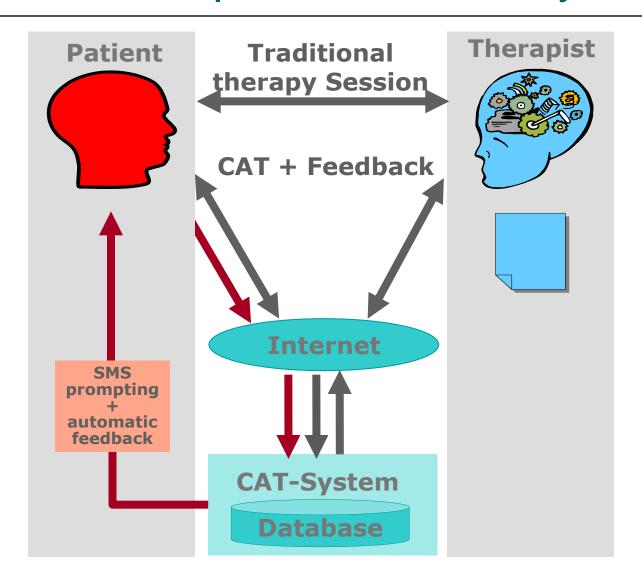
Intervention:
increasing
regulation
and
self control

A tailored intervention

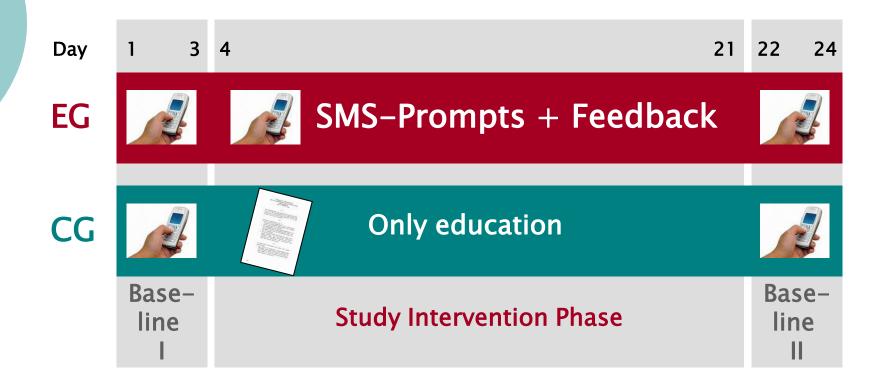
SMS-Feedback via mobile phone is expected to

- improve mood perception
- increase acuity of perception of aversive inner tension states
- suggest helpful strategies for the regulation of tension states
- increase self control

Technical platform: CAT-System



Design



Prompts and feedback

- 4 prompts per day (randomly distributed) requested ratings of current mood states
- Mood could also be rated self initiated and had to be rated after awakening and before going to sleep
- EG: during intervention phase: Feedback, suggesting help strategies if tension ≥ 7
- 30 min later SMS-Prompt for effects of intervention
- Request for a list of helpful strategies whenever needed

Mood assessment

Are you currently experiencing one of the following mood states? If yes, how intense?

(0 = not at all, 9 = maximal intensity)

Happiness 0	1	2	3	4	5	6	7	8
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Aversive inner tension

Are you currently experiencing an aversive inner tension state?

0 1 2 3 4 5 6 **7 8 9**



- Distraction
- Physical Activity
- Intense Sensations
- Get Support
- Relaxation/Breathing Exercise

Prompt after 30 Minutes:

- How intense is the tension now?
- Could you use one of the suggested strategies? Which one?



Subjects and number of input

EG: N= 45 Patients (2 males)



Input: 276/3182/262

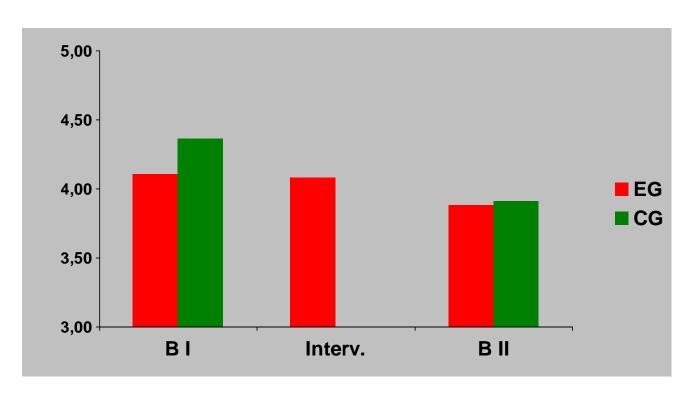
Feedback-Help 350; effect of help 338

CG: N= 49 Patients (6 males)

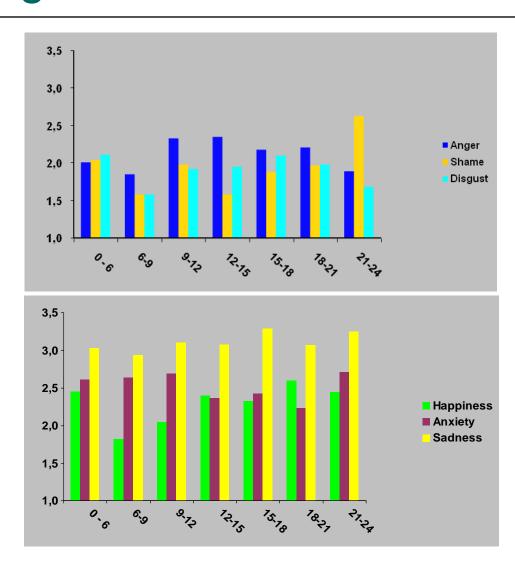
Input: 327/-/294

Tension values

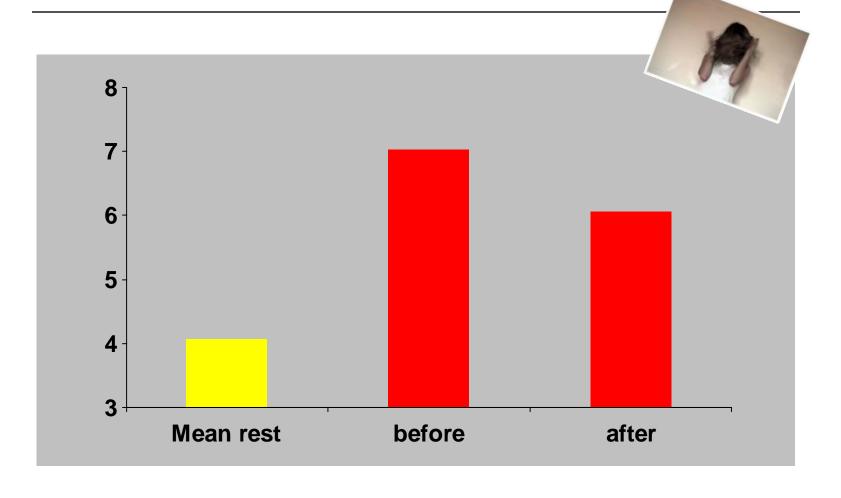




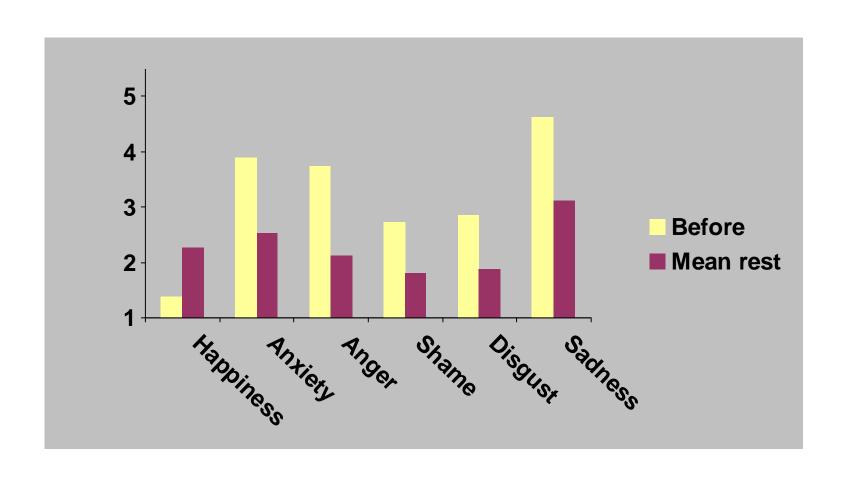
Mood ratings: 24 hrs, EG, Intervention phase



Effects of feedback on tension



Mood and inner tension



Use of help strategies

Distraction	30%
Physical activity	14%
Relaxation	12%
Support	10%
Intense sensations	8%
Other	6%
None	18%

Limitations

- Patients should know that there is no immediate contact to a therapist
- Feedback-help is created automatically and is not individually tailored
- Reinforcing value of feedback may have influenced tension ratings

Summary

- Inner aversive tension in general and throughout the day decreased, albeit not exclusively for the EG
- The different mood states were, in conjunction with increased inner aversive states, perceived as more intense
- Feedback helped to reduce tension levels
- Methods to reduce aversive states were applied in differing frequency

Outlook

- The method seems a promising approach to react immediately to aversive states as they occur and to induce patients to recur to prearranged therapeutic strategies
- A comprehensive final analysis will be able to show to what extent overall treatment has been positively affected.
- It can be used with potential profit in other areas as well

CAT used in the treatment of tinnitus

- Attention distraction exercises are an important feature within the treatment of tinnitus
- An ongoing study uses the same technical platform.
- For every self initiated attention distraction exercise the effect on tinnitus has to be reported
- If no exercises are reported, a reminder is sent out together with a suggestion of various exercise types.



St. Franziska-Stift

... thank you very much for your attention Psychosomatische Fachklinik Bad Kreuznach