

## **RESPIRATORY BIOFEEDBACK**

**A new approach  
to stress intervention  
for the military**

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### **Introduction**



## **A short overview**

Since 1975 I have worked in the field of treating psychosomatic patients.

Part of my job has been the design and use of biofeedback (BF) apparatuses.

BF includes electronic methods for the self- control of autonomous bodily functions.

BF can be used well used for psychophysiological relaxation.

For this the methodical approach to respiration is our favorite.

The mobile RFB.micro is suitable for relaxation intervention in the military sector.

## **The problem to relax**

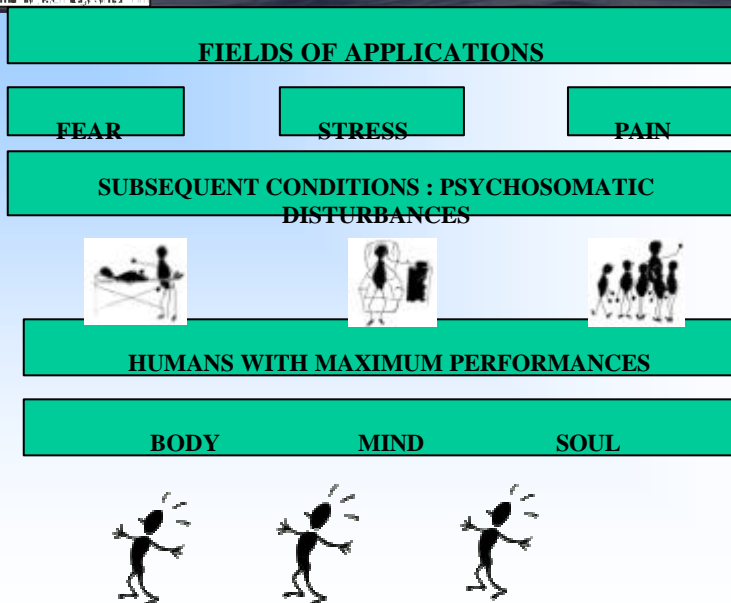
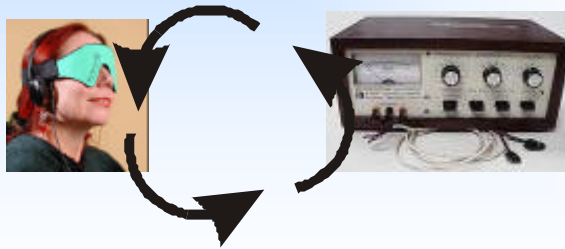
**Problematic approach to the involuntary body functions**



**The solution**



### What is Biofeedback (BF)?

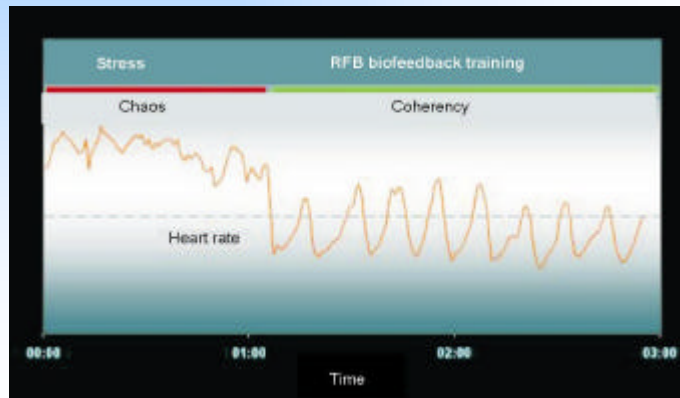


**THE RIGHT PARAMETER**

**THE RESPIRATION**



**Biofeedback and “learning” to relax**



**Respiratory biofeedback – a well -  
founded approach to relaxation**



## Lessons learned



## Changes and opportunities

BF is a combination of methods including

- operant learning.
- the use of electronic apparatuses and.
- psychological interventions.

Even difficult patients can relax by means of BF.

Motivation is increased.

Attitudes to relaxation methods and psychological intervention are changed.

Reduced learning time for relaxation.

Cost reduction in drugs.

Increased self- efficiency.

Simplified access to psychotherapy.

BF is often an important component of a complex prevention and therapy system.

Therapist and patient relationship is most important.

## Risks and Limitations

- Risks are low. There is no dependency.
- There are different limitations with the respective parameters.
- Immediate influence on patients can be rapidly exerted.
- A shift of relaxation to daily use without a BF apparatus is not easy.
- The relaxation process should be controlled and stabilized by a therapist.
- The relaxation effect can be observed after a longer training period.
- BF is only one component of the whole therapy system.
- A therapist specialized in BF.
- A good therapist- patient - relationship is essential.

## Clinical contraindications

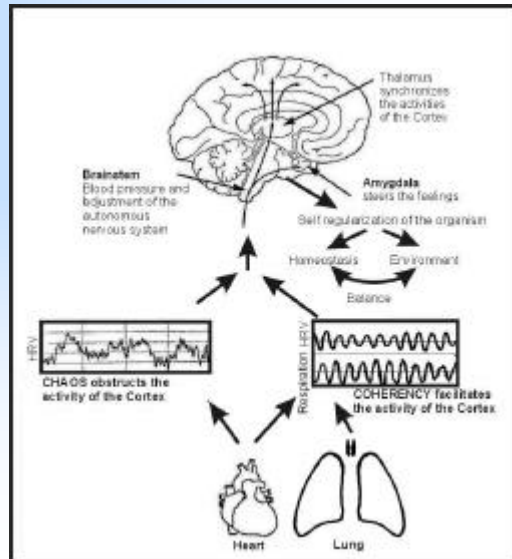




## Wirk factors of RFB

The lungs and the heart affect brain functions.

The relaxation process is based on the same nerve and hormone patterns like the stress mechanism, but in the opposite direction.



## Wirk factors of BF

- Expectations
- Motivation
- Self-efficiency
- BF principle
- Special indicator
- Amplification of positive feedback
- Learning process
- Interoception
- Therapist - patient - interaction
- Suggestion, Autosuggestion, Placebo
- Information
- health and disease model
- Change of attitudes

## The RFB.micro system

- It works based on the respiratory BF.
- It is battery operated.
- It is easily transportable.
- There are several different uses.
- There are different sounds and melodies.

The demonstration will be given after this lecture.



## RFB for stress reductions during military missions



## The message

BF is a method for developing self- control of body functions.

BF is a combination of methods including operant learning, the use of electronic apparatuses and psychological interventions.

It is suitable for relaxation and stress reduction.

The approach to respiration is particularly useful.

BF training should be followed by self training methods.

Mobil RFB.micro is useful in the military sector.

