

Integrating Biofeedback with Psychotherapy to Treat Combat PTSD

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Disclaimer

Materials that are included in this course may include interventions and modalities that are beyond the authorized practice of mental health professionals. As a licensed professional, you are responsible for reviewing the scope of practice, including activities that are defined in law as beyond the boundaries of practice in accordance with and in compliance with your professions standards. Information and opinions expressed are not intended/should not be taken as representing the policies and views of the US Government. The presenter has no affiliation with any biofeedback software or hardware products discussed here.

Behavioral Objectives

- List problems associated w/ combat and military PTSD
- Identify core processes in PTSD
- List biofeedback modalities that can be integrated with therapy

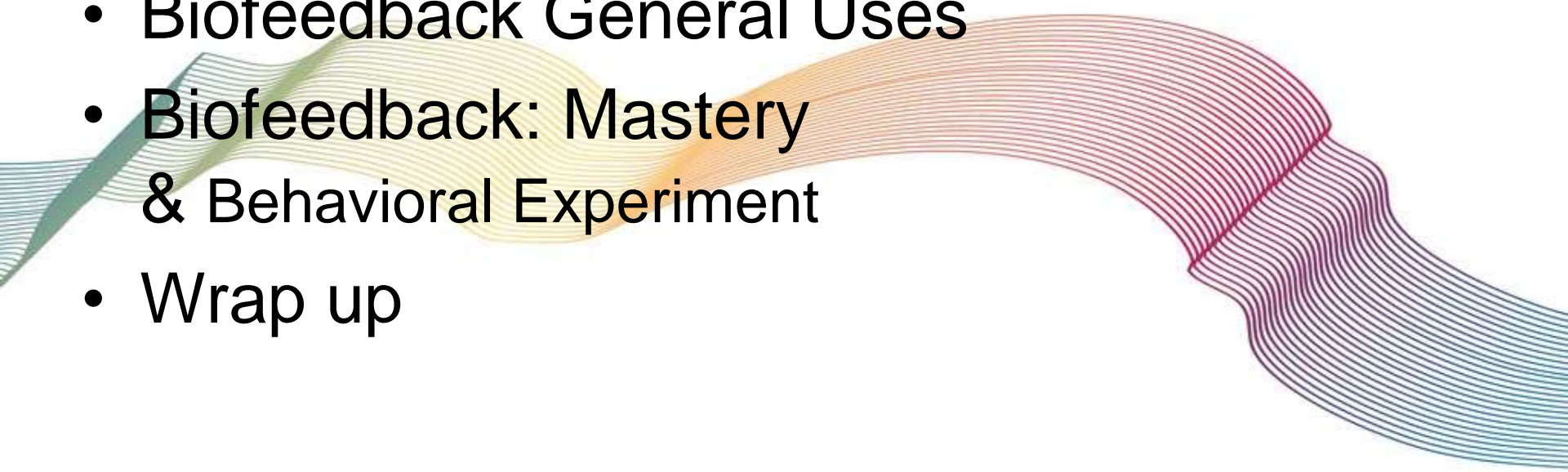


Behavioral Objectives continued

- Discuss advantages biofeedback integration
- Describe how biofeedback can help with emotions



Agenda

- Combat PTSD/Stressful military experiences
 - Core processes
 - Biofeedback General Uses
 - Biofeedback: Mastery & Behavioral Experiment
 - Wrap up
- 



Focus

To address four core processes

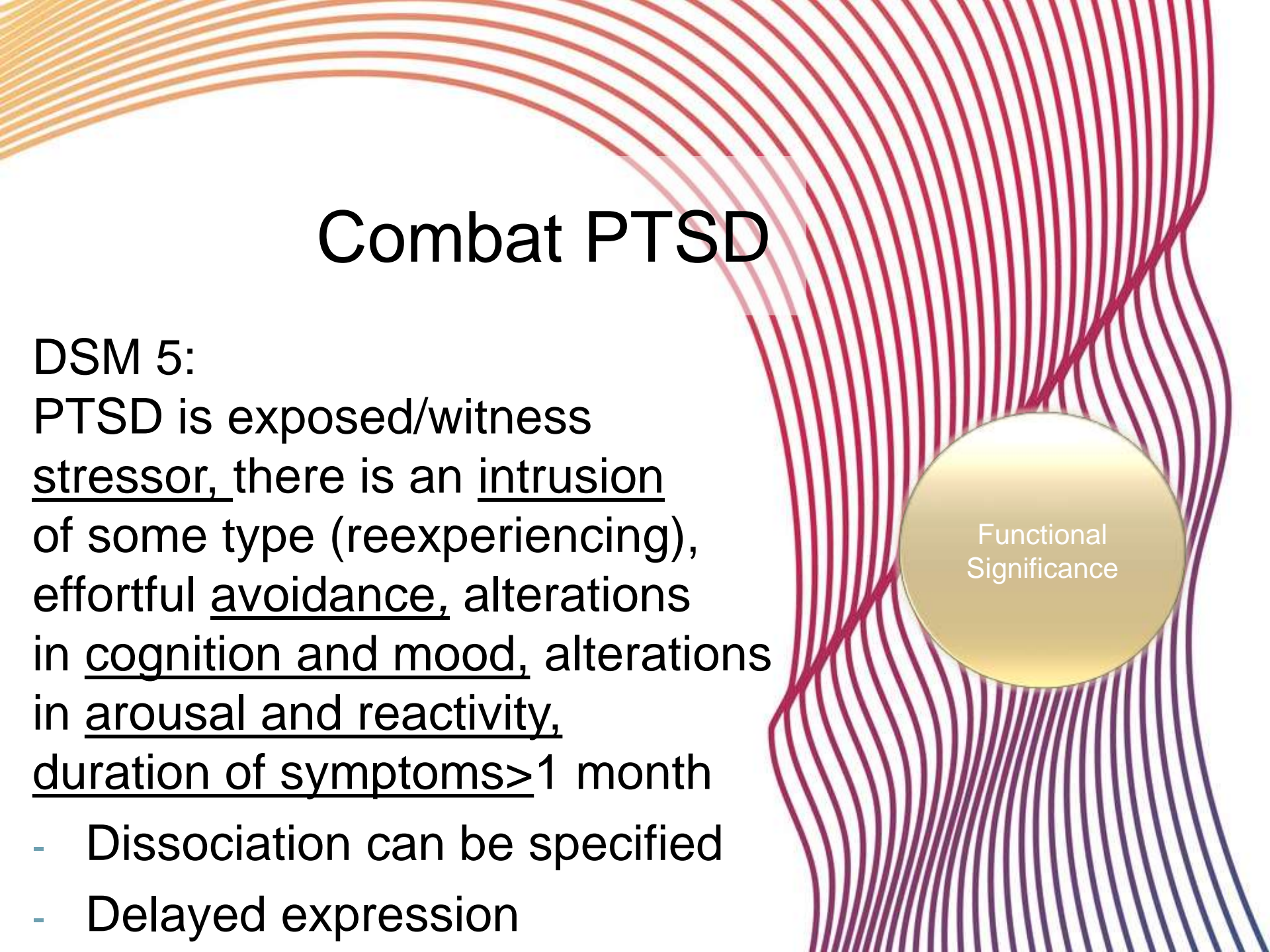
- ➔ context of interpersonal safety
- ➔ encouraging creativity
on part of practitioner
- ➔ using pre-existing skills

Combat PTSD

DSM 5:

PTSD is exposed/witness stressor, there is an intrusion of some type (reexperiencing), effortful avoidance, alterations in cognition and mood, alterations in arousal and reactivity, duration of symptoms > 1 month

- Dissociation can be specified
- Delayed expression



Functional
Significance



Combat PTSD

What is it?

- Type of PTSD experienced by those who have been in combat
 - Ranges from live fire to support workers in war zone area
 - Military operations other than war



Combat PTSD

Don't forget....

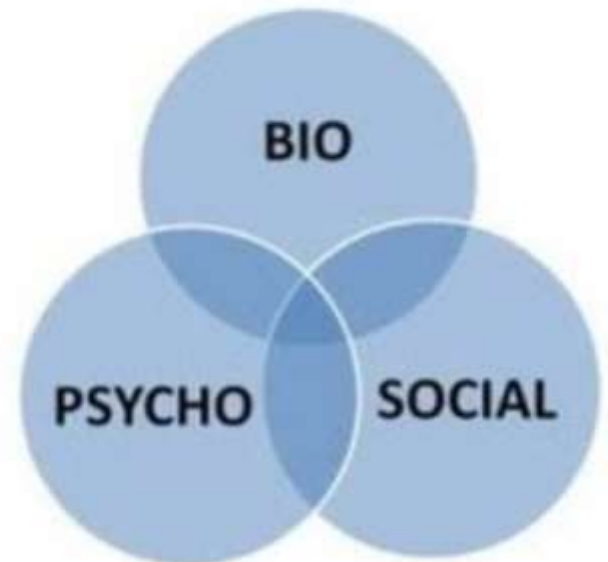
- Military stressful experiences
 - MST
 - Traumatic training experiences
 - Vicarious



Combat PTSD..one of many

Combat PTSD

- Pretrauma and Posttrauma
 - Personality, genetics, parental care, past history of trauma, psychological problems, life styles, beliefs, expectations, biological process, endocrine, brain... many....



Combat PTSD

Job expectations

- ✓ Kill others
- ✓ Destroy things
- ✓ Take territory
- ✓ Destroy enemy's ability
- ✓ Destroy enemy's will to fight
- ✓ Protect friendlies
- ✓ Follow orders without question



Combat PTSD

Specific War Characteristics

- ✓ WWII
- ✓ Korean
- ✓ Vietnam
- ✓ Desert Shield/storm
- ✓ Global War on Terrorism



Combat PTSD

Deployment

- ✓ Length of deployment
- ✓ Recovery time...
12 months sufficient?
- ✓ Symptoms rewarded as occupational hazard
- ✓ Cumulative burden
- ✓ Combat specialization
- ✓ Stressors adapting to the deployment zone



Combat PTSD

Exposure

- ✓ Threat of life
- ✓ Discharging weapon
- ✓ Loss
- ✓ Seeing carnage and loss of life
- ✓ Moral injury: acts of omission and commission
- ✓ Betrayal of service and role expectations





Combat PTSD

- ◉ Due to multiple chronic exposures, more difficulties in:
 - Affect dysregulation
 - Negative self concept
 - Interpersonal disturbance

Combat PTSD

Meanwhile at home....

- Sense of powerlessness/
helplessness
overseas
- How the news is delivered
- Marriage / divorces / legal
- Housing / eviction



Combat PTSD



- How might combat PTSD vs. other PTSD be different?
 - Compulsive checking
 - Exaggerated self-reliance/control
 - Hypervigilance
 - Badge of honor - society

Combat PTSD

Cultural mores of Veterans

- Compulsive Self-reliance → Asking help is weakness
- Deservingness distortion -> *I don't deserve to get better*
- Symptoms may feel right – egosystonic
- Mental health stigma



Combat PTSD

- Veterans have higher frequency of PTSD than civilians
- Controversy: standard trauma focused therapies don't benefit all



Combat PTSD

- What is improvement?
- When there are improvements, are they clinically significant?
- Too difficult
- Temporary results?



PTSD Resources

- APA Clinical Practice Guidelines

<http://www.apa.org/ptsd-guideline>

- VA PTSD

<http://www.ptsd.va.gov/professional/index.asp>

- VA PTSD Consultation Program

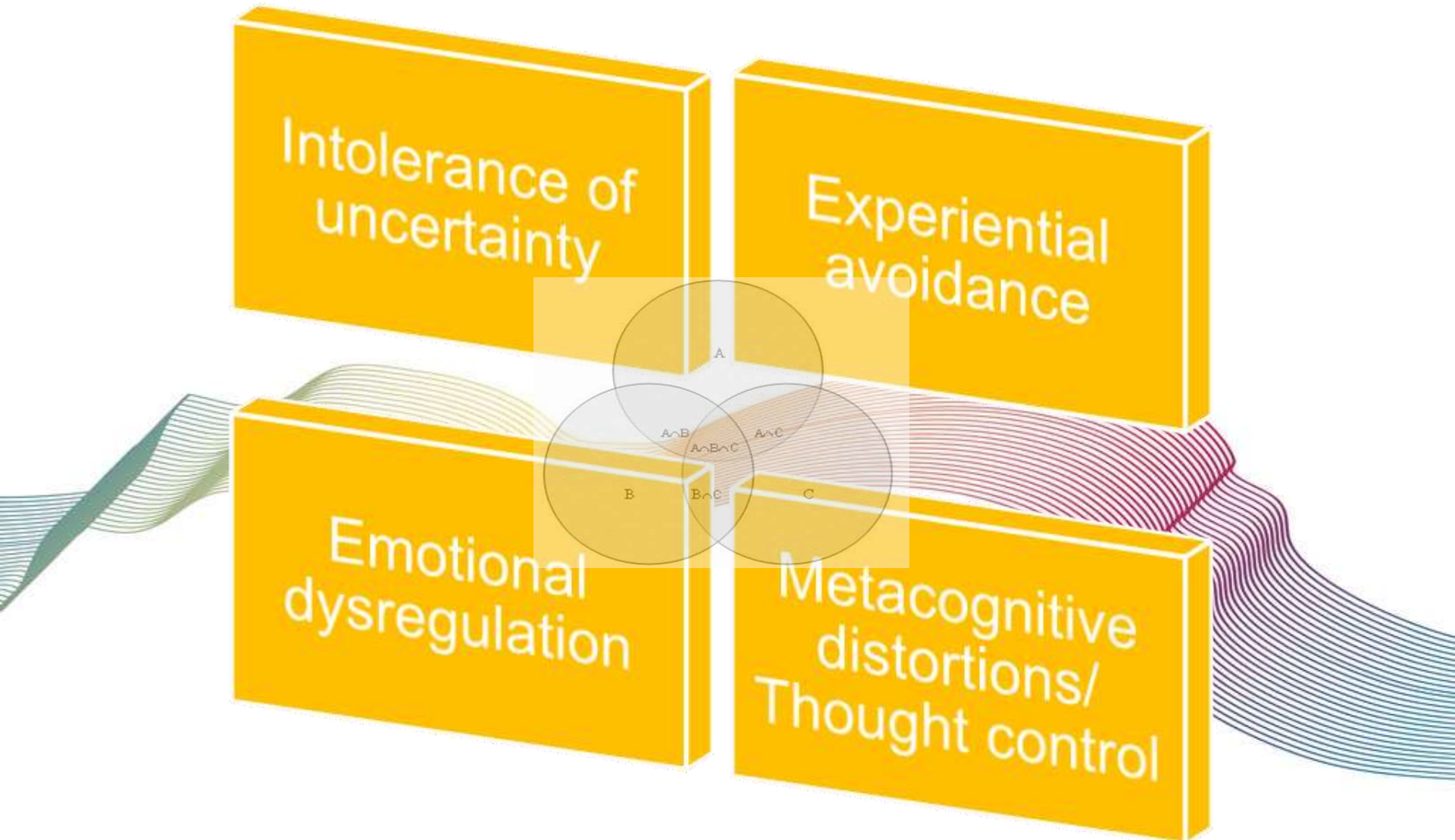
Free PTSD consultation for providers working with Veterans.

866-948-7880 ptsdconsult@va.gov

- Clinicians Trauma Update

<https://www.ptsd.va.gov/professional/publications/ctu-online.asp>

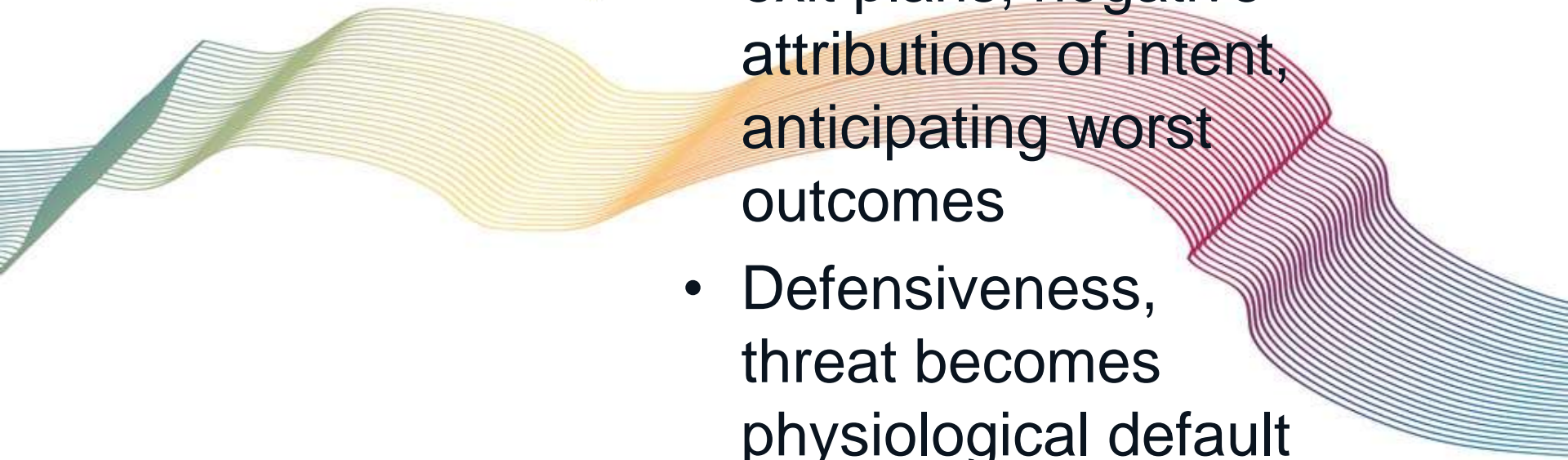
Core Processes in PTSD



Core Processes in PTSD



Intolerance
of
uncertainty

- Hypervigilance, safety behaviors, related to inaction
 - Military training reinforces exit plans, negative attributions of intent, anticipating worst outcomes
 - Defensiveness, threat becomes physiological default
- 

Core Processes in PTSD



Experiential
avoidance

- Escaping
 - Internal sensations (thoughts, memories, feelings, pain)
 - External environments (people, situations, triggers)
- The struggle to control
- Lose contact with positive experiences – behavioral repertoire
- Values

Core Processes in PTSD



Emotional
dysregulation

- Inability to appropriately manage emotional response to triggers
- Difficulty tolerating intense emotions
- Cognitive appraisal
 - Unbearable, take over, fear, coping worse than others, shame, fear, must relieve, absorbed

Core Processes in PTSD

Metacognitive
distortions/
Thought control

- White bear phenomenon

"Try to pose for yourself this task: not to think of a polar bear, and you will see that the cursed thing will come to mind every minute."

— *Fyodor Dostoevsky*



Core Processes in PTSD



Metacognitive
distortions/
Thought control

- Thought suppression studies have shown that people who suppress thoughts intentionally more likely to experience
- Classic – ‘don’t think of a pink elephant’

Biofeedback General Uses



- Khazan, 2013
- Foster Awareness
- Facilitate Change
- Generalize outside world

Interpersonally safe
environment

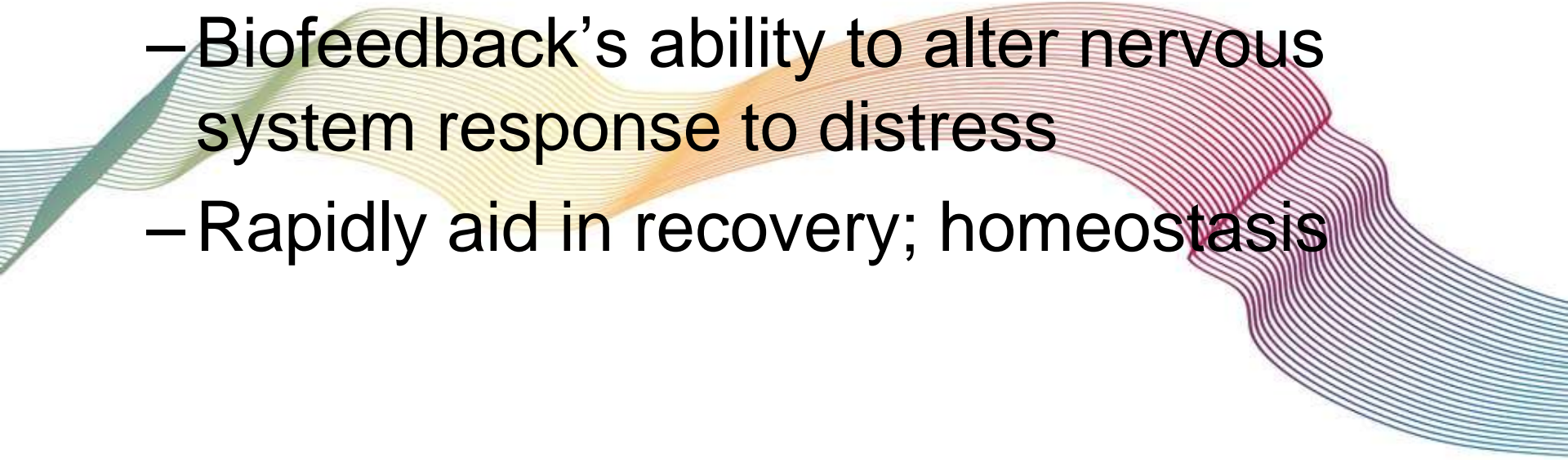
Biofeedback General Uses



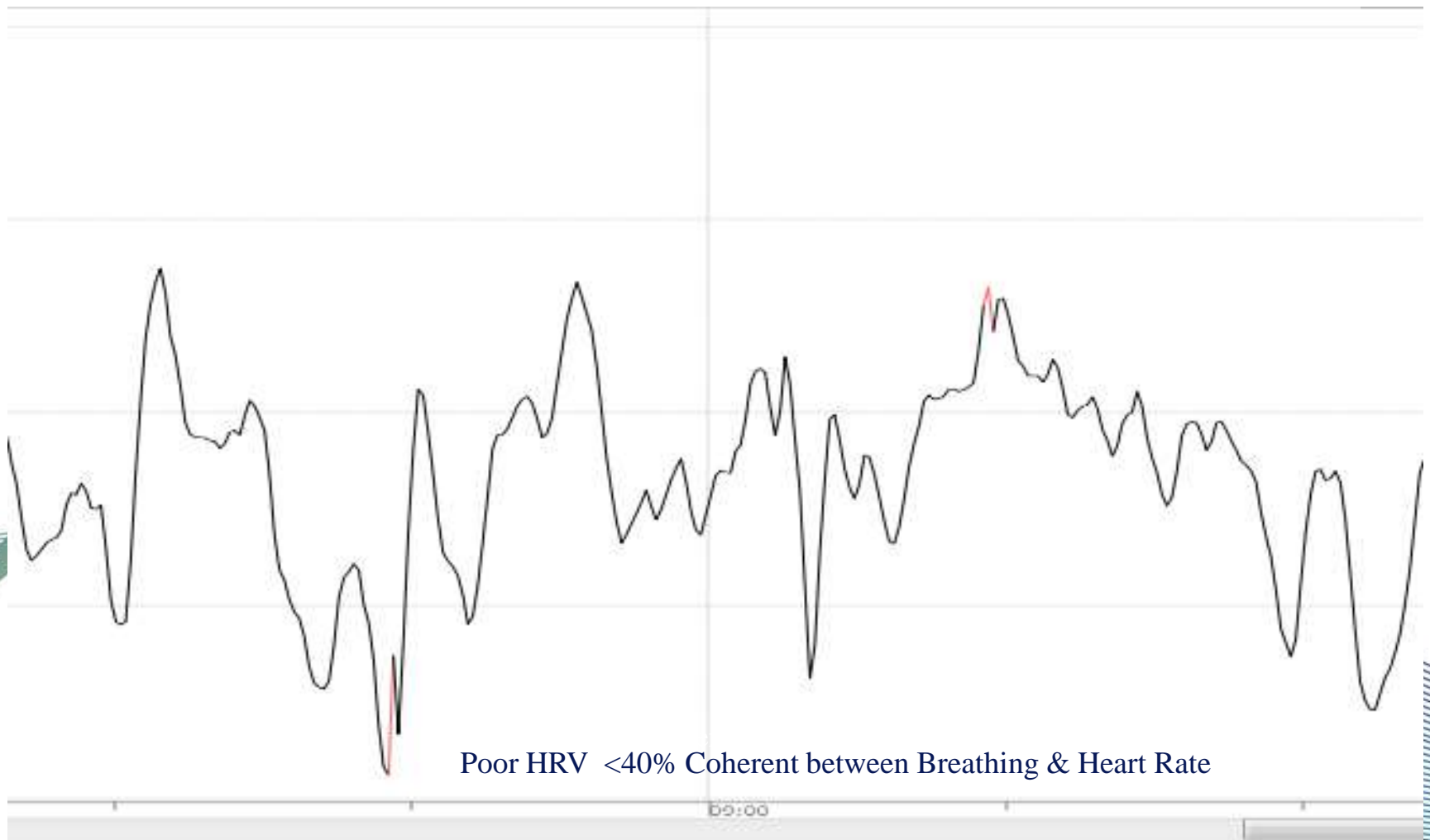
- Psychophysiological Profile
- Resonance Frequency Assessment
- Respiration training / skin conductance / temperature / HRV/ EMG
- CBT/ACT therapies
- Mindfulness

Biofeedback: Mastery & B.E.

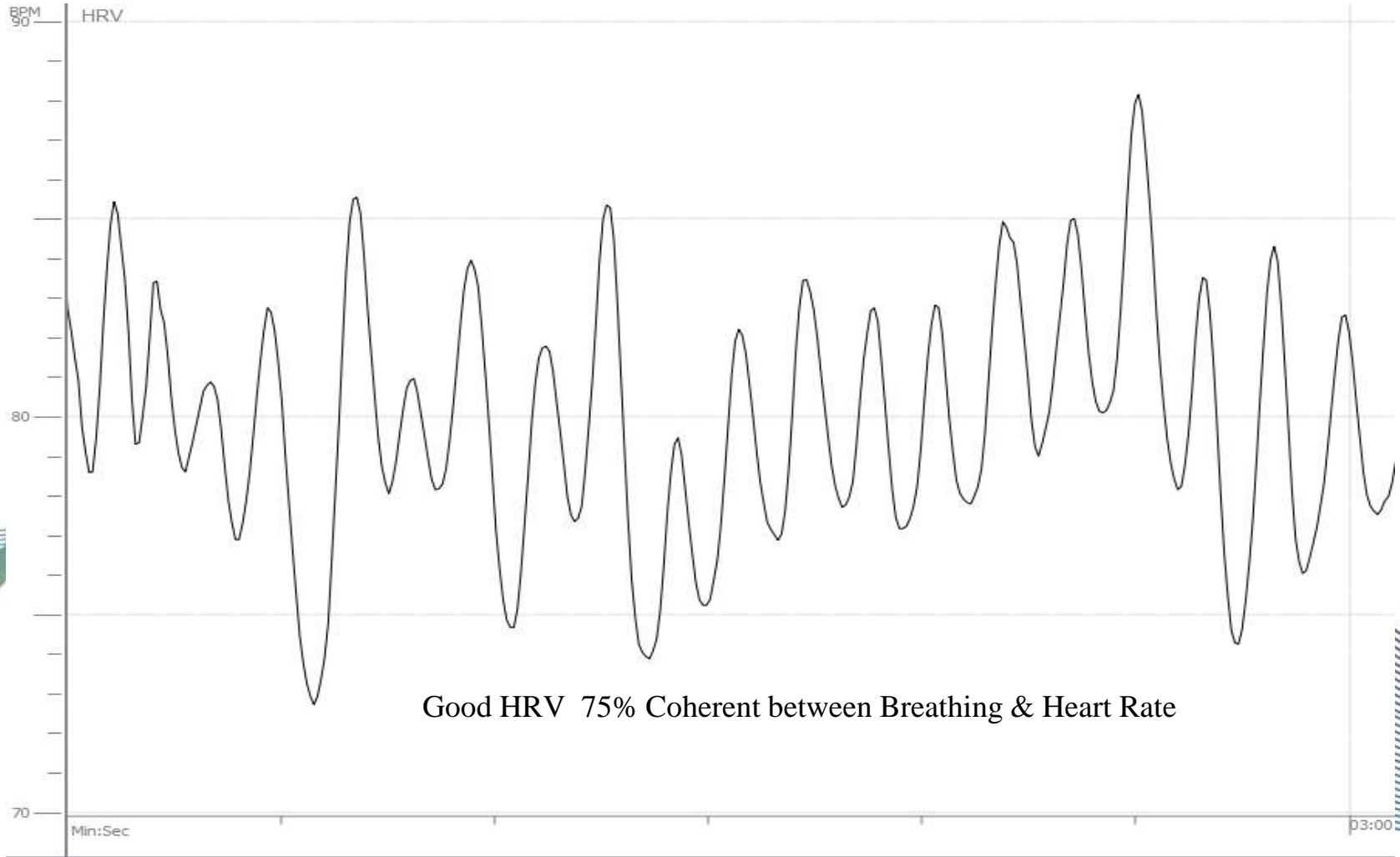
Biofeedback has a good track record in
mastery of skills

- Biofeedback's ability to alter nervous system response to distress
 - Rapidly aid in recovery; homeostasis
- 

Biofeedback: Mastery & B.E.



Biofeedback: Mastery & B.E.



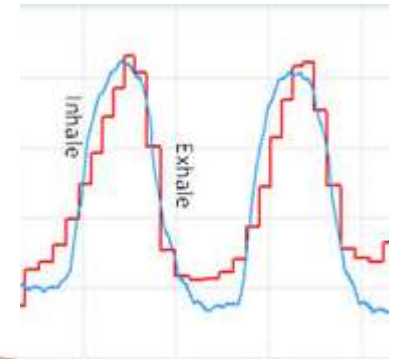
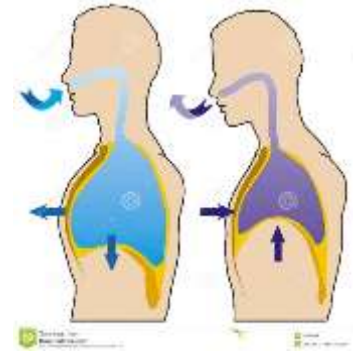
Biofeedback: Mastery & B.E.

- Behavioral experiments in CBT are effective, powerful ways to bring about change
- Using as a behavioral experiment in the session to target beliefs related to core processes
- Then experiments in real world



Biofeedback: Mastery & B.E.

- Respiration
 - Rate, rhythm, and quality
- HRV
 - Pyramids
- Skin Conductance
 - Puzzles and happy/sad face
- Attentional exercises
 - Open focus/space metaphor



SKY IS LIMIT



Intolerance of
Uncertainty

Biofeedback: Mastery & B.E.

- *“I can’t tolerate uncertainty.”*
- *“I can’t predict what will happen if I’m not guarded or vigilant enough.”*



- Need for predictability and low threshold for uncertain arousal

Biofeedback: Mastery & B.E.

- BF lowers defensiveness and guardedness
– the experience of low arousal is data

PARADOXICAL ANXIETY =
FRIEND



Biofeedback: Mastery & B.E.

- Respiration rate training can be introduced to embrace 'uncertainty' of internal sensations



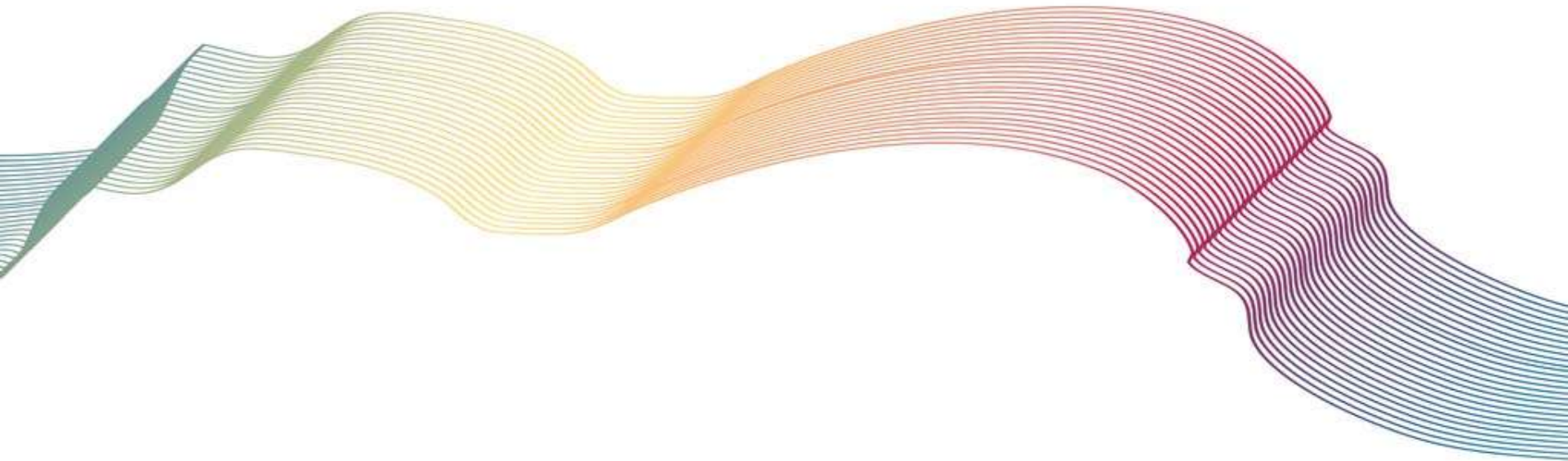
- 14 bpm vs. 12 vs. 10 vs.
8 vs. 6 ..

SESSION = TESTING GROUND

Biofeedback: Mastery & B.E.



Biofeedback: Mastery & B.E.



Biofeedback: Mastery & B.E.

OUTSIDE SESSION:

- Whenever you feel uncertain (i.e., locks, looking for exit strategies, planning get aways, etc.), refrain from safety strategies and accept uncertainty

- *You can use your breathing as a way to ground you and remind you to stay calm*

CHALLENGE = ACCEPT UNCERTAINTY



Experiential Avoidance

Biofeedback: Mastery & B.E.



- *“I don’t want to feel xxxx.”*
- *“I don’t want to think about yyyy.”*

Hayes – Acceptance Commitment Therapy

Focusing on the relationship with internal experiences, not the reduction

Biofeedback: Mastery & B.E.



*“I have good news and bad news.
The bad news is you may never be
able to get rid of your _____.
The good news is you can learn to live
with them better.”*

Biofeedback: Mastery & B.E.

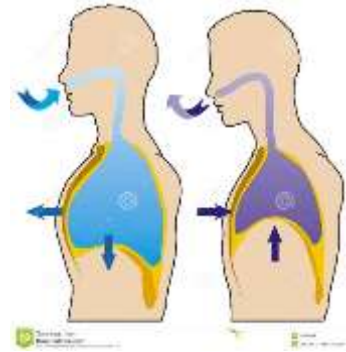
- *“I have to work hard to avoid upsetting feelings.”*
- *“I can’t do what I need if I feel overwhelmed and anxious.”*
- *“I am quick to leave situations when I feel uneasy.”*



Biofeedback: Mastery & B.E.

Experiments:

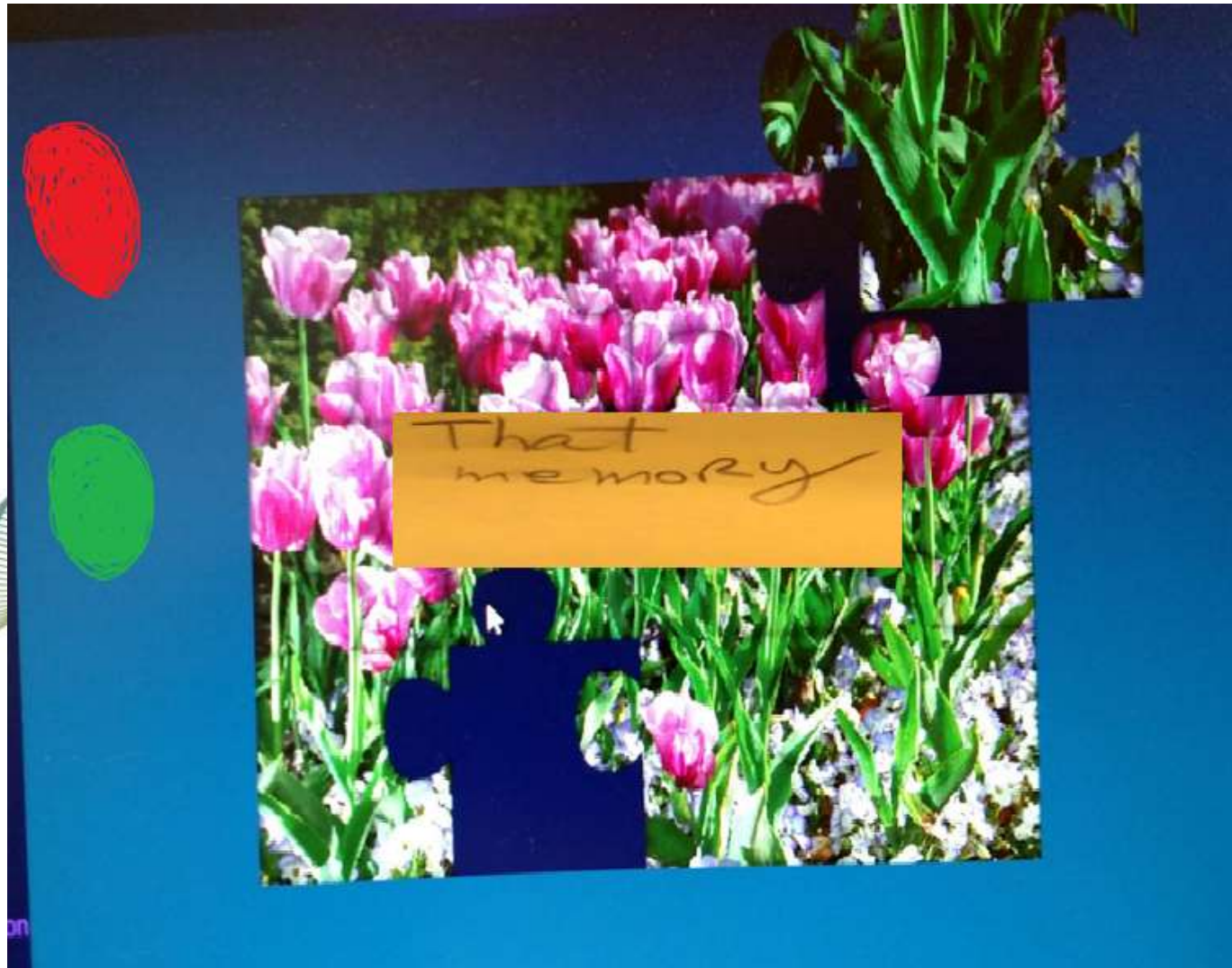
- Allow emotional reactivity
- Accept and give up struggle for control
- In this phase, not explicitly: teaching relaxation, aborting anxiety, or cultivating low arousal



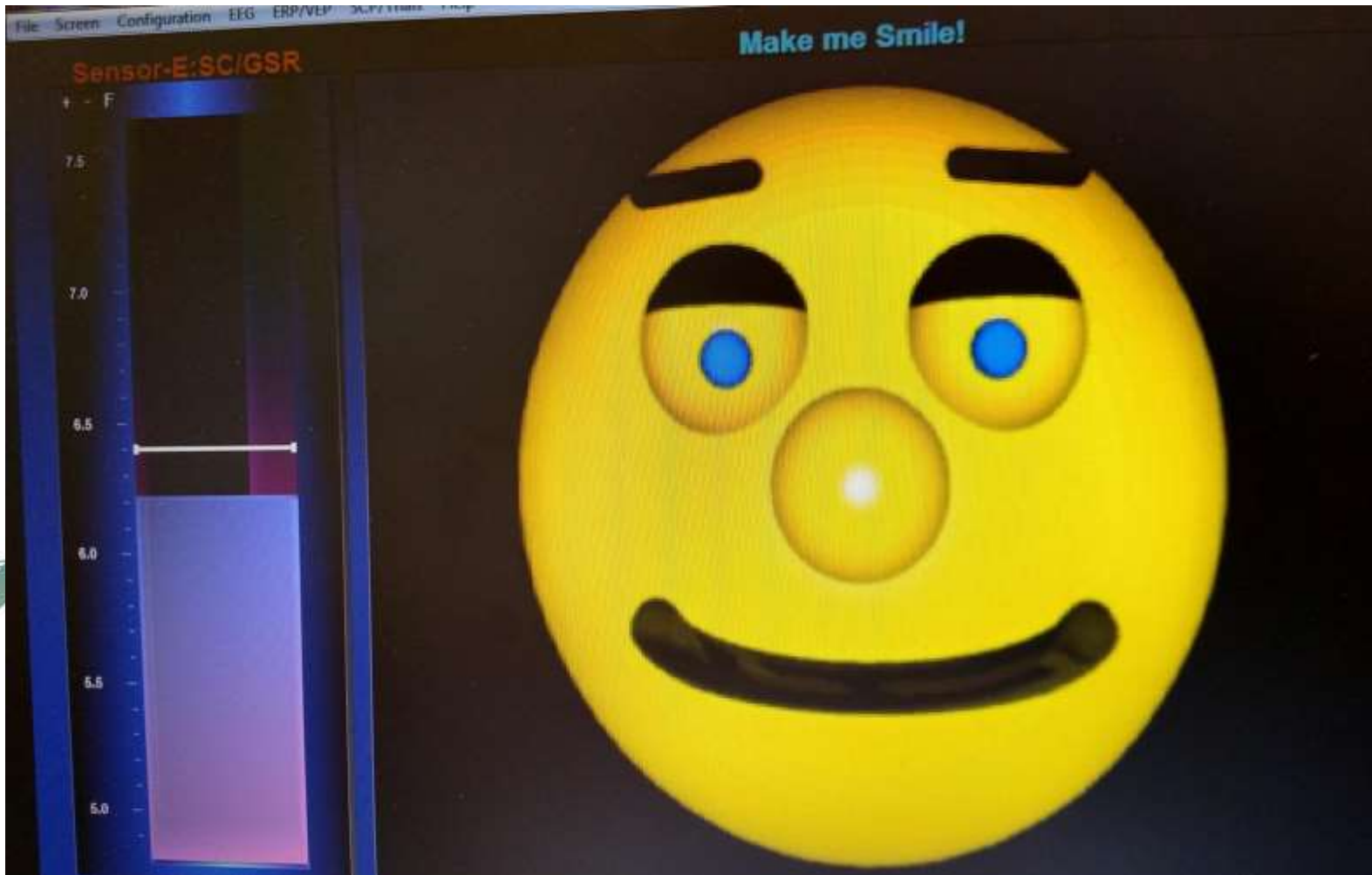
Biofeedback: Mastery & B.E.



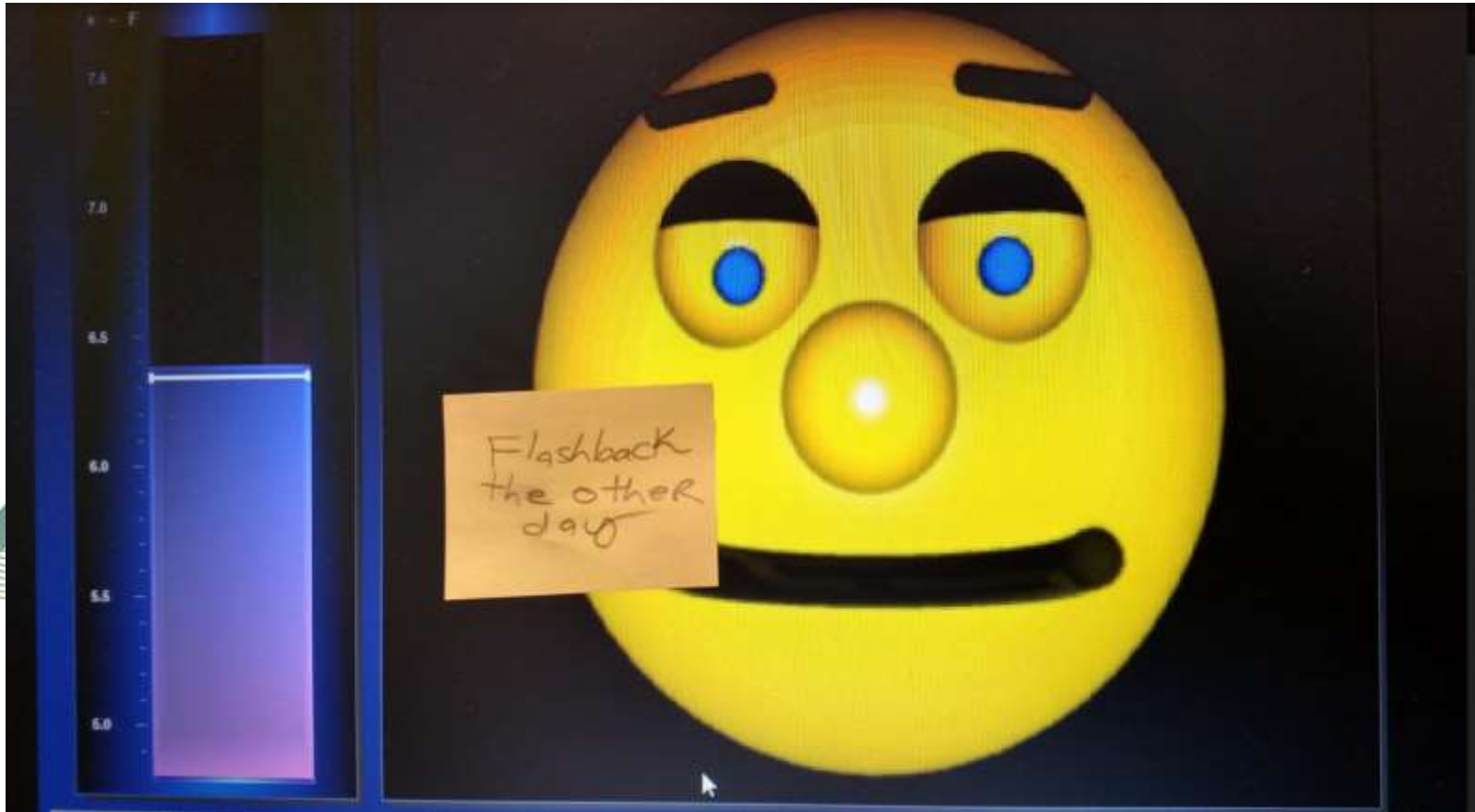
Biofeedback: Mastery & B.E.



Biofeedback: Mastery & B.E.



Biofeedback: Mastery & B.E.





Emotional Dysregulation

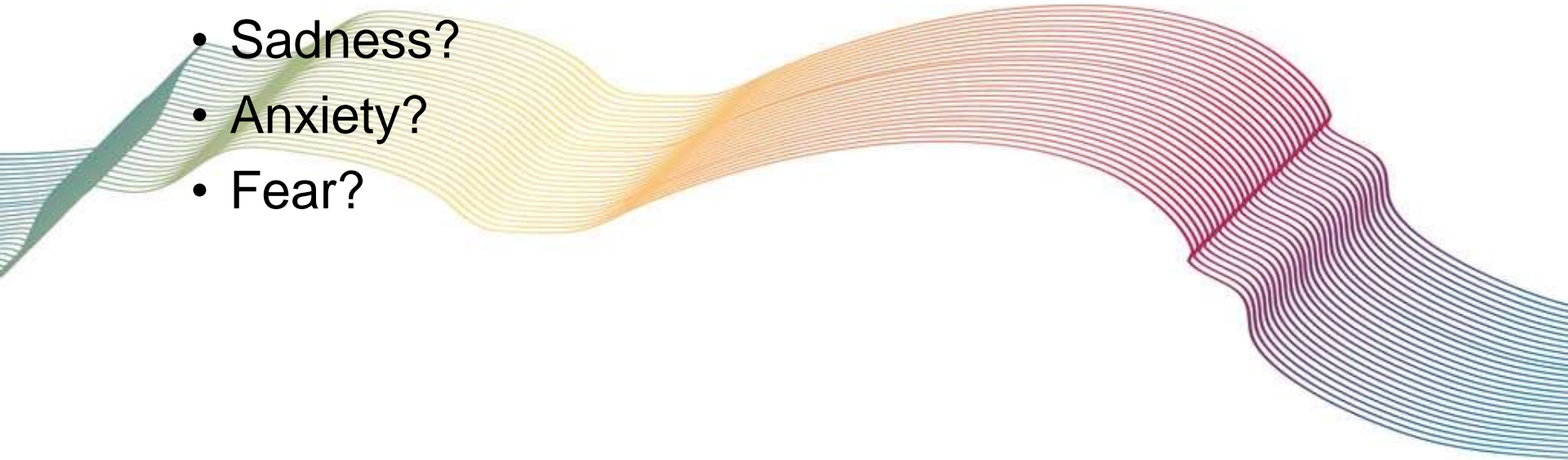
Biofeedback: Mastery & B.E.

- Difficulties in:
 - Awareness of emotions
 - Acceptance of emotions
 - Regulating emotions and behaviors
 - Clarity of emotions



Biofeedback: Mastery & B.E.

- Education on emotions
- David Barlow's Unified Protocol
 - What is the purpose of
 - Anger?
 - Sadness?
 - Anxiety?
 - Fear?



Biofeedback: Mastery & B.E.

- In session exposure
- Sitting with emotions and notice the pull
- SCR output: conversation about emotional awareness
- Interpersonally safe environment



Biofeedback: Mastery & B.E.



Biofeedback: Mastery & B.E.




Biofeedback: Mastery & B.E.





Thought
Control/Metacognition

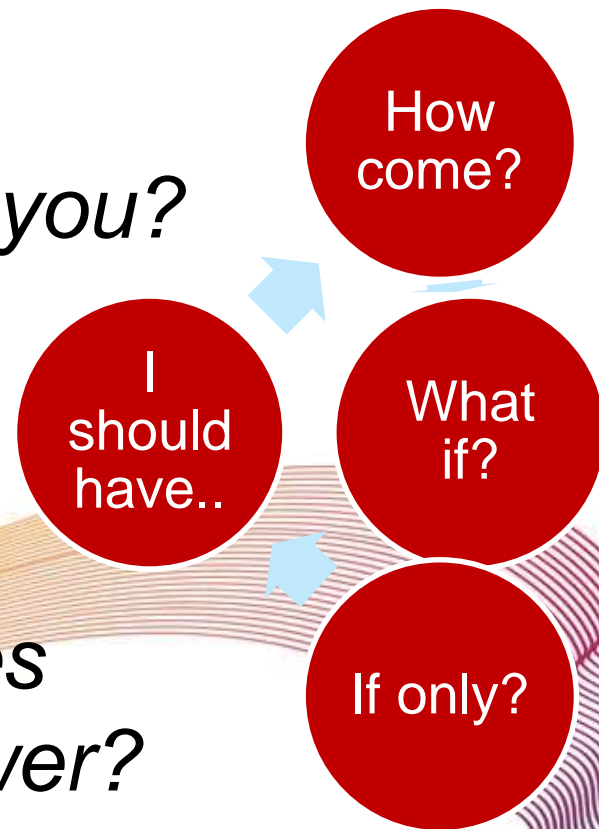
Biofeedback: Mastery & B.E.

- Wells Metacognitive therapy
 - Process of thinking rather than content
 - Disadvantages of overthinking
 - Advantages of worry / rumination
 - Flexibility
- 

Biofeedback: Mastery & B.E.

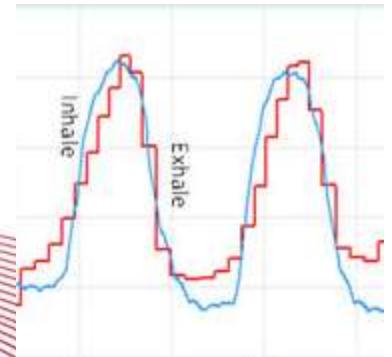
- Trauma thoughts...
- *Has this ever helped you?*
- *How many more times have you done this?*
- *How many more times until you find an answer?*

100 / 1,000 / 1,000,000



Biofeedback: Mastery & B.E.

- Present moment: Abandon attempts to analyze
- Heart rate variability and respiration training
- Behavioral experiment:
Use breathing in real life/
mindfulness/15 min



Biofeedback: Mastery & B.E.

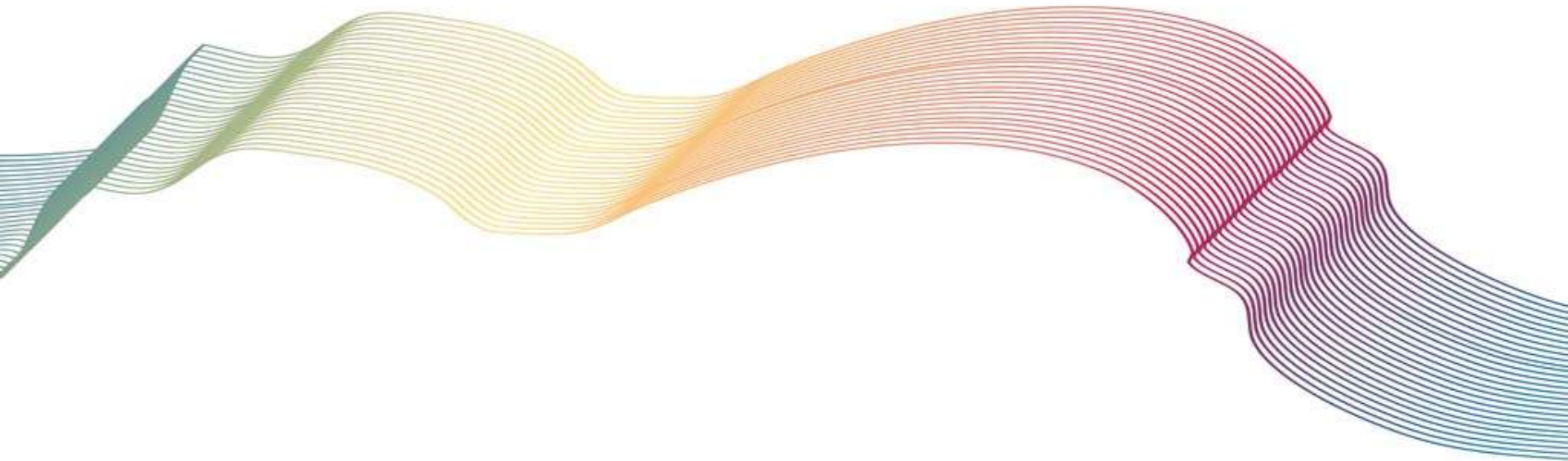
- Fehmi's Open Focus exercise
- Suspend conceptual elaboration
- Metaphor of space is excellent
- Do you have to replace one thought after another? Do you have to answer the why's?



Wrap Up

Other applications/ideas

Case issues



Resources and References

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