Using Biofeedback Within Relationship Therapy: Self-Soothing Tools

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My Therapy Dog Bosco

Reactivity in Emotionally Distressed Relationships

Betrayal

“Betrayal is the secret that lies at the heart of every failing relationship—it is there even if the couple is unaware of it.”
Tens Other Ways to Betray

1. Conditional Commitments
2. A Nonsexual Affair
3. Lying
4. Forming a Coalition Against the Partner
5. Absenteeism or Coldness
6. Withdrawal of Sexual Interest
7. Disrespect
8. Unfairness
9. Selfishness
10. Breaking promises

Negative Effects of Betrayal

- These couples can become trapped in an “absorbing state of negativity”.
- They may become “imprisoned in the reach motel for lovers: They check in, but they can’t check out”.
- They can become physically over aroused to the hostility between them and experience flooding.

Gottman Research-Based Marital Therapy

- University of Washington
- Studied the masters and disaster of marriage
- Based on 40 years of research
- Therapy is an integration of behavior, cognition, and physiology (Sound Marital House)
- Divorce prediction, 7 longitudinal studies

The Sound Relationship House

- MARRIAGE SEEN AS HELPING MAKE DREAMS AND ASPIRATIONS COME TRUE
- CREATING SHARED MEANING & RITUALS OF CONNECTION; HONORING ONE ANOTHER’S LIFE’S JOURNEY
- LOVE MAPS
- TURNING TOWARDS VERSUS TURNING AWAY
- FONDNESS AND ADMIRATION SYSTEM
- THE POSITIVE PERSPECTIVE
- EFFECTIVE CONFLICT RESOLUTION (softened startup, repair & de-escalation, accepting influence, compromise, accept and analyze, physio-physiological soothing)

“She’s no good for you, Harry”
Best Predictors of Divorce

- More negative than positive affect and interactions during conflict (.8 to 1).
- Four Horseman of the Apocalypse

CRITICISM
DEFENSIVENESS
CONTEMPT
STONEWALLING

Physiological Arousal And Its Role In Marital Conflict

- Physiology predicts the stability and happiness of marriages
- DPA (diffused physiological arousal)
  - Heart rate of 100 BPM or greater
  - SpO2 of 95% or less
  - Flooding
  - Reduced ability to process information
- The autonomic nervous system
  - Sympathetic & Parasympathetic
- Male and female differences in arousal (Break Ritual)

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DPA “General Alarm Response”

- Increased heart rate
- Reduced oxygen concentration in the blood
- Increased myocardial contractility
- Increased vasoconstriction
- Increased sympathetic and decreased parasympathetic activation
- Increased amygdala activation
- Decreased frontal lobe activation
- And so on
**Possible Signs of Flooding**
- Long eye closure or eyelid flutters
- Increases in any of the Four Horseman
- Arms akimbo position
- Hips swiveled away from partner
- No positive affect
- Controlled facial expressions
- Auto - involvements
- Any indication that regular breathing has stopped
- Anger – lips pressed together

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**BFB Instruments for Assessing DPA**
- Finger pulse oximeter and pulse rate
- HRV monitors
- Heart rate monitors

**Reduced Ability to Process Information**
- Decrease in one’s ability to take in information
- Increase in defensiveness
- Reduction in creative problem solving
- Reduction in the ability to listen and empathize

**Finger Pulse Oximeter**
- Measures percent of oxygen saturation (SpO2) in the blood and pulse rate
Finger Pulse Oximeter Sensor

Finger Pulse Oximeter

Graphs

Reports

Implementing the Finger Pulse Oximeter into your Relationship Practice

- Need two finger pulse oximeters
- Add information to your consent form
- Use during the first or second session
- Attach to index finger of the non-dominant hand
- Check pulse waveform for data accuracy
- If necessary, attach to ear lobe (cold hands)
- Obtain two baselines: a one-minute "eyes open and relax" baseline, and a one-minute "eyes closed" baseline, no alarm feedback
- Observe and/or record pulse rate and SpO2 during the intake session
- Engage the couple in a 10-minute conflict dialogue
- Take a two-minute pre-conversation baseline
- Observe and/or record pulse rate and SpO2 data, no alarm feedback
- From the data collected, is self-soothing training immediately required?
- Use as needed to assist with awareness of flooding and self-soothing during couples dialogue with alarm feedback

HRV
Heart Rate Variability

- HRV is the spontaneous change in HR.
- HRV is related to interaction between sympathetic and parasympathetic influences at sinoatrial node in the heart.
- HRV is measured with power spectral analysis.
- Emotions and respiration are reflected in HRV.

Interconnectivity between Intrinsic Ganglia in the Human Heart

Heart Communication with the Brain

Heart Rate Variability: The Hearts Rhythm

The Heart-Brain Relationship

- The heart has its own complex nervous system – the “Heart Brain”.
- The heart sends far more information to the brain than the brain sends to the heart.
- The heart signals especially affect the brain centers involved in strategic thinking, reaction times, and self-regulation.

Example of High Level of RSA

Notice how heart rate increases with inhale. Heart rate decreases with exhale. This pattern shows high vagal tone and a high amount of heart rate variability.
Emotional Self-Regulation

Learning to manage and overcome difficulties or disappointments in ourselves or others comes a little easier with emotional self-regulation.

Emotions and HRV

- Emotions have significant influence on HRV.
- Negative emotions, such as frustration, anger, resentment, etc. produce incoherent heart rate variability (HRV) patterns.

Coherence

A highly efficient psycho-physiological state in which biological systems synchronize Alignment of emotions, mind, body & spirit In the zone, feeling “in sync”, clicking

Psychophysiological Coherence

When the physiological mode is driven by a positive emotional state, it is called psychophysiological coherence.

The quality of our thoughts and emotions affect the heart’s electromagnetic field which energetically affects those in our environment — whether we are conscious of it or not.
Heart-Brain Synchronization (Between Two People)

Subject 2: EEG
Subject 1: ECG

The emWave Approach to Better Relationships will provide you with knowledge to help your couples:

- Self-soothe by learning to detect when they are stressed and to calm themselves
- Value the power of their emotions
- Create positive feelings and positive affective interactions

The emWave Approach Guides You

- In learning how to use the emWave2 and emWave Desktop
- In acquiring the basic skills to teach physiological coherence
- In Integrating the emWave technology into your couples sessions

Implementing HRV Into Your Practice

Selecting your HRV instruments

Integrating The emWave Approach Into Your Relationship Practice

*Four Session Protocol*

- Session 1 - introducing the emWave2 to your couples
- Session 2 - introducing the emWave Desktop to your couples
- Session 3 - using the emWave2 to facilitate effective communication
- Session 4 - using the emWave2 at the beginning of each session and during therapy
Session 1 - Introducing the emWave2 to your couples
- Introduce in the first session
- Add paragraph to your consent form
- Display two emWave2
- 2/3 into session demonstrate the emWave2
- Introduce the Quick Coherence Technique
- Provide Coherence Coach CD, for home practice

Session 2 - Introducing the emWave Desktop to your couples
- Early in the second session attach one or both of the couple to the emWave Desktop
- Take a two minute baseline reading
- Have them focus on something that is stressful
- Click on the Coherence Coach, have them breathe to it
- Have them focus on a positive feeling

Session 2 continued
- Explain and give positive feedback on the displayed data
- Switch to the other partner if using a single computer system

Session 3 - Using the emWave2 to facilitate coherent communication with the Rapoport Intervention
- Have your couple select an area of disagreement
- Select a Speaker and Listener
- Attach each to an emWave2 with ear sensor
- Speaker’s Job:
  1. No blaming, no “you” statements.
  2. Talk about your feelings.
  3. Use only “I” statements about a specific situation.
  4. State a positive need. Within every complaint there is a longing, and a recipe.
- Listener’s Job:
  1. Hearing the content of the speaker’s needs and perspective, the narrative.
  2. Hearing the speaker’s affect (being able to label the affects, and feel a bit of them).
  3. Summarizing to the speaker’s satisfaction the speaker’s content and affect.
  4. Validating the speaker by completing a sentence like “It makes sense to me that you would feel that way and have these needs, because…”

- Allow about 10 to 15 minutes for the exercise.
- Ask your couple to practice the Rapoport Communication exercise during the week.
- This is a good time to recommend the emWave2 for home use.
Session 4 - Using the emWave2 at the beginning of each session and during therapy

- Begin each session with the emWave2, and once coherence is achieved, have your couple do one or more of the following:
  - Imagine themselves successfully experiencing the skill you will engage them in
  - Feel appreciation for their partner and open their hearts
  - Focus on what they enjoy about their relationship
  - Visualize achieving their relationship goals

- Use during sessions to increase coherence and especially when partners become stressed and or flooded, for self-soothing.

Demonstration of emWaves in Couples Therapy

Summary

- Severely distressed couples may be dealing with betrayal
- Use a pulse oximeter to detect and teach self-soothing
- Use HRV to teach breathing skills, emotional self-regulation, and enhanced connection.
- Integrate these tools into your couples practice.

2013 AAPB 44th Annual Scientific Meeting in Portland, Oregon, March 13 - 17

Dr. Walt Ciecko and Ray Varlinsky will present:

Using HRV Biofeedback with Couples from an Imago Relationship Therapy and Gottman Method Couples Therapy Perspective Date: Friday, March 15
Time: 1:30pm – 2:30pm
Reducing Reactivity and Increasing Connection in Couples with HRV Biofeedback

Date: Saturday, March 16
Time: 12:15pm - 1:15pm

A change of heart changes everything

www.heartfocus.org