

**Mindfulness-enhanced
Applied Relaxation**

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Disclosures

- Grant/Research Support:
 - NIMH MH074589; MH085060

Acknowledgments

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Therapists and clients

Outline

- Background on traditional AR
- Content of AR
- Enhancing AR with mindfulness- and acceptance-based skills

Traditional Rationale behind AR

Model of Generalized Anxiety

- According to Borkovec and Costello (1993):
 - Anxiety involves an interacting system of cognitive, physiological, affective, and behavioral responses that lead to a series of anxious responses in a given situation
 - These responses develop over time, often building on each other, increasing the subjective intensity of the anxious response.

Therefore . . .

How AR Targets this Model

- An intervention that enables the client to notice the earliest anxiety responses and react with a different response, namely relaxation, should attenuate the anxiety response
- Therefore, AR focuses on:
 - Identifying early anxiety responses
 - Responding with relaxation to these early signs

Efficacy of AR

Meta-analyses on AR

- According to a recent meta-analysis, Applied Relaxation (AR) is an efficacious treatment for anxiety disorders (Manzoni et al., 2008).
- For GAD:
 - AR has been shown to be more effective than nondirective therapy (Borkovec & Costello, 1993) and equally as effective as cognitive or cognitive behavioral therapy (Borkovec & Costello, 1993; Öst & Breitholtz, 2000).

Preliminary Data

	Pre M(SD) (n=41)	Post M(SD) (n=33)	6m M(SD) (n=30)	Pre-Post <i>t</i> (n=33)	<i>p</i>	<i>d</i>
GAD CSR	5.44 (0.71)	2.70 (1.57)	2.77 (1.59)	14.64	<.001	2.59
HAM	20.54 (6.79)	11.48 (6.20)	10.75 (6.93)	9.57	<.001	1.69
QOLI	0.86 (1.18)	1.87 (1.60)	1.92 (1.41)	-6.52	<.001	-1.15
PSWQ	70.41 (6.22)	52.28 (10.69)	52.27 (10.57)	12.44	<.001	2.20
BDI-II	17.92 (10.62)	7.85 (8.51)	7.47 (8.73)	8.02	<.001	1.42

Overview of Treatment Structure*

*The basic treatment structure presented here is drawn from *New Directions in Progressive Relaxation Training: A Guidebook for Helping Professionals* (Bernstein, Borkovec, & Hazlett-Stevens, 2000) and *Applied Relaxation: Manual for a Behavioral Coping Technique* (Öst, unpublished).

Potential Clients

- Focus on clients with GAD
- May be effective for a range of clients because of relatively simple procedures
- Requires significant out of session time

Skills of Therapy

- Building relaxation skills
- Increasing awareness of early signs of anxiety
- Applying relaxation to early signs of anxiety

Treatment Length and Structure

- 16 weekly sessions
 - Sessions 1-4 90-minutes; Sessions 5-16 60-minutes
 - Sessions 14-16 spaced to every other week
- Structure
 - Psychoeducation (session 1)
 - Building initial relaxation and cue detection skills (sessions 1-8)
 - Applying relaxation in response to cues (sessions 8-16)
 - Relapse prevention (sessions 14-16)

Content of AR

General Flow of Treatment

- Building relaxation skills & becoming aware of early signs of anxiety
 - Develop some mastery with each step before moving on
- Then, apply relaxation when notice early signs
 - Continued focus on being able to apply earlier and more efficiently
 - Develop a range of relaxation options to be used in varied contexts
- Practice both in and out of session

AR Skills

- Relaxation Training
- Early Cue Detection
- Applied Relaxation

Relaxation Training

Relaxation Training

What is Known	What Relaxation Does
<ul style="list-style-type: none">• Anxiety is an interaction of our physical sensations, thoughts, feelings, and behaviors• High levels of tension makes the anxiety spiral more likely to start even with smaller stressors	<ul style="list-style-type: none">• Changes the physical sensations, which affects thoughts, feelings and behaviors• Decreases tension since tension and relaxation are opposite processes• Damping down physical anxiety and tension reduces the likelihood that small stressors will trigger an anxiety spiral

Relaxation Training Skills

- Diaphragmatic Breathing
- Progressive Muscle Relaxation (PMR)
 - 16 muscle group PMR
 - 7 muscle group PMR
 - 4 muscle group PMR
 - Release-only PMR
- Cue-controlled Relaxation
- Differential Relaxation
- Rapid Relaxation

Progressive Muscle Relaxation

- Tensing and releasing groups of muscles in a “progressive” way
- Tense and release each muscle group twice
- Focus on the feelings of relaxation during exercise
- Time to center and expand awareness in beginning and end of exercise

Relaxation Training Demo

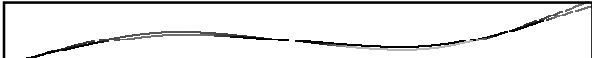
www.mindfulwaythroughanxietybook.com

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Common Challenges

- Tensing too much/not enough
- Falling asleep during practice
- Not actively engaging in exercise
- Increase in anxiety during practice
- Body relaxed while mind continues to wander
- Not finding enough time to practice
- Anxiety is “all worry”

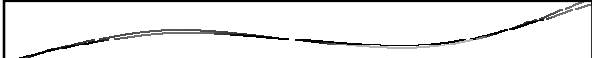


Early Cue Detection



Early Cue Detection

What is Known <ul style="list-style-type: none">• Anxiety is a process• We are often unaware of anxiety until it escalates• It is easier to stop the anxiety spiral if we interrupt the process early	What Cue Detection Does <ul style="list-style-type: none">• Monitoring anxiety increases awareness of the process of anxiety• Recognizing the early signs allows time for an alternate response before anxiety builds
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Early Cue Detection Techniques

- Self-monitoring
 - Daily Monitoring
 - Significant Experiences
- Imaginal Exercises

Self-Monitoring

Date	Time	Anx.	Situation	Physical Sensations	Worries and Other Thoughts
10/11	5pm	75	Waiting for family to come over	Chest pain Heart palpitations	Is the apartment clean enough?
10/13	3pm	60	Friend having personal problems	Tense Sick Feeling	He's going to get hurt
10/13	6pm	65	Driving in traffic	Heart racing Trouble breathing	I'll get pushed to the wrong street
Early Signs of Anxiety: Heart beating					

Imaginal Exercises

- Help client recognize the progression of anxiety cues
 - Chain analysis
- Imaginal exercise to recreate a situation
 - Re-experience the situation
- Focus on what came before
 - Watching a reel of film
 - Rewinding the film to pay attention to what came first

Early Cue Detection Exercises

Common Challenges

- What situations to choose
- Difficulty getting in/staying in situation
- Resistance to exercise because of high anxiety
- Reporting global anxiety
- Cues from only one domain

Applied Relaxation

Applied Relaxation

What is Known	What AR Does
<ul style="list-style-type: none">• Interrupting the spiral anxiety can reduce subsequent anxiety• The higher the anxiety, the more difficult it is to use relaxation skills	<ul style="list-style-type: none">• Applying relaxation at the first sign of anxiety interrupts the anxiety spiral• Applying at the first sign makes relaxation easier to implement• Applying frequently, will weaken the habit of anxiety and decrease tension

Putting it all together

- Combining early cue detection and relaxation training into a usable skill for clients
- Working towards clients applying relaxation at the earliest sign of anxiety
 - Both in session and out of session

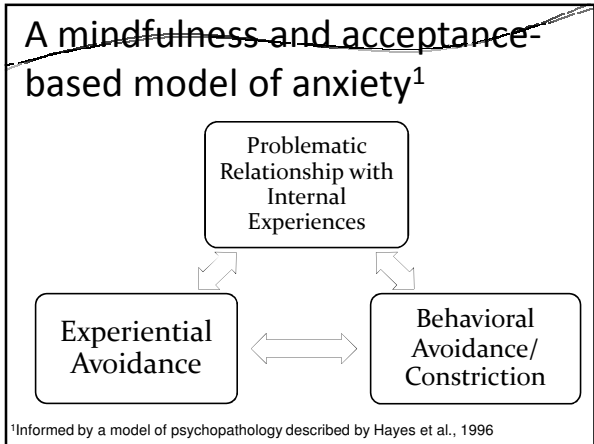
Demonstration of Applied Relaxation

Common Challenges

- Forgetting to apply
- Presence of new cues
- Using relaxation too late
- Leaving the situation too quickly

Questions on AR

Enhancing AR with Mindfulness and Acceptance-based Skills



Potential Mechanisms for AR

- Mindfulness
 - Decentering/defusion
 - Acceptance/decreasing experiential avoidance
 - Clarity of emotional responding
- Engagement in life/decreasing behavioral avoidance (similar to other behavioral therapies for anxiety)

**Balancing
Acceptance AND Change**

Some initial data

- Mindfulness (Fuchs, Hayes-Skelton, Scheller, Roemer & Orsillo, Nov. 2010)
 - 26 clients diagnosed with GAD who received AR
 - Significant increase in mindfulness across therapy [$t(25) = -5.94, p < .001$].
 - Change in mindfulness correlated with change in GAD severity [$r(24) = -.44, p < .05$]

Mindfulness

- What is meant by “Mindfulness”
 - A type of present-moment, non-judgmental and compassionate awareness
- Relaxation bears striking functional similarity with mindfulness (Borkovec & Sharpless, 2004)
 - Cultivation of present moment, compassionate awareness

Decentering

Decentering

- What is meant by “Decentering”
 - The ability to observe thoughts and feelings as objective events rather than personally over-identifying with them
- Ways that AR enhances Decentering
 - Self-monitoring and early cue detection involve a more objective and curious stance towards anxious responses
 - PMR encourages present moment awareness of internal experiences often in a more objective manner

Decentering - Examples

- Maria responded to PMR by saying that she felt more fully aware of her experience and was able to see the situation differently in that she felt like she had the choice of whether or not to react. She described it as though her worries and anxiety were like a little kid who was having a tantrum, trying to get her attention; and rather than overreacting to them, she described being able to stand back and see that it was just a natural response from her body.

Ways to Promote Decentering

- Exercises are designed to promote decentering
- Therapist language
 - “So you’re having the thought that . . . “
 - “You’re noticing a feeling of tightness”
- Encourage clients notice and observe

Acceptance

Acceptance

- What is meant by “acceptance”
 - Allowing what is to be rather than wishing or trying to make it other than it is
- Ways that AR enhances acceptance
 - Imaginal exercises require sustained contact with emotions, approaching them with curiosity
 - PMR involves continued practice even when worries arise
 - Allowing worries to arise without needing to respond

Acceptance - examples

During early cue exercises, Renee was quick to identify situations in which she was irritable or angry; however, it was much more difficult for her to notice the physiological signs and anxious thoughts that led up to her feeling irritable or angry. Renee found these exercises extremely difficult because of the emotions that arose. In session 4, Renee mentioned a strong desire to avoid anxiety and other emotions at all costs. Her resistance to these exercises provided the opportunity for a discussion about the importance of paying attention to painful events to become more aware of the subtler cues of anxiety. Over time, Renee became more willing to engage in the early cue detection exercises and reported becoming more accepting of her internal experiences.

Acceptance – examples

- With continued PMR practice, Julia began to notice that she would experience anxiety and an urgency to leave the exercise (to attend to her to do list). Overtime, the practice of staying with the entire exercise helped her to stay “here” rather than constantly thinking about what else needed to be done. Instead she started noticing her urge to be active, without feeling like she had to give in to it.

Ways to Promote Acceptance

- Demonstrate acceptance in the language you choose
 - “It’s ok to feel anger during this exercise. Just notice the anger as a cue and let’s move forward with the imaginal exercise.”
- Encourage clients to notice worries and other sensations as they arise
 - “Just noticing what you are experiencing as you draw your attention to the sensations of relaxation.”

Emotional Clarity

Clarity of Emotional Responding

- Difficult to respond appropriately to emotions when unaware of what the emotion is in response to
- Ways that AR enhances emotional clarity
 - Early cue exercises focus directly on understanding the anxiety response
 - Incorporating emotions as early cues helps sort out underlying emotions making it clearer how to respond

Emotional Clarity – Examples

- Carlos noticed that when a friend was pressuring him to make a quick decision about a social activity, he experienced tightness in his chest while also having anxious thoughts about the consequences of making the wrong decision, that quickly developed into anger. Carlos was able to recognize that his anger was secondary to his anxiety about making decisions rather than being about the friend, which allowed him to approach rather than avoid his friend.

Ways to Promote Emotional Clarity

- Specifically ask about emotional response
- Focus on spirals of how various cues interact with emotion cues

Engagement

Engagement in Life

- Ways that AR enhances engagement in life
 - Being able to successfully apply relaxation in response to anxiety increases willingness to enter anxiety provoking situations
 - Overtime, better able to engage in meaningful activities regardless of emotions that may arise

Engagement in Life – Example

- Kendra reported that when she saw her school principal, she first noticed a sudden increase in her heart rate and the thought “I wonder if today is the classroom visit day.” She noticed these early signs of anxiety and took a few deep breaths (applying a breathing exercise) to decrease her anxiety before speaking with her principal rather than trying to leave or ignore the situation as she had done before.

Ways to Promote Engagement

- Notice what situations that clients are avoiding and suggest that they approach the situations now that they have a new skill
 - Similar to other behavioral therapies

Take Home Message

- Listening for and promoting mindfulness, decentering, acceptance, emotional clarity, and engagement in life during AR may further enhance the efficacy of this relatively straightforward treatment approach
- Notice the first signs of anxiety and apply.

Questions?

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