

TRANSDIAGNOSTIC TREATMENTS FOR ANXIETY DISORDERS

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Outline

- Why Transdiagnostic Treatments?
- Transdiagnostic Treatment Protocols
- Transdiagnostic Treatments in Practice
- Case Formulation

WHY TRANSDIAGNOSTIC TREATMENTS?

A Definition of “Transdiagnostic Treatments”

“those that apply the same underlying treatment principles across mental disorders, without tailoring the protocol to specific diagnoses”

McEvoy, Nathan, & Norton, 2009

1. Proliferation of anxiety disorder diagnoses

Anxiety Disorders Then and Now

- **DSM-I** (1952): 3 disorders (anxiety reaction, phobic reaction, obsessive-compulsive reaction)
- **DSM-II** (1968): 3 disorders (anxiety neurosis, phobic neurosis, obsessive-compulsive neurosis)
- **DSM-III** (1980) and **DSM-III-R** (1987): 9 disorders

Antony, Pickren, & Koerner, 2009

Anxiety Disorders Then and Now

- **DSM-IV** (1994) and **DSM-IV-TR** (2000): 12 disorders, with various subtypes and specifiers.
- **DSM-5** (Coming in 1 week): Divided into three categories: (1) Anxiety Disorders (11 disorders), (2) Obsessive-Compulsive and Related Disorders (9 disorders), and (3) Trauma and Stressor-Related Disorders (7 disorders). Total of 27 disorders (and numerous subtypes) across these three broad categories.

2. Shared pathology across anxiety disorders, including behavioral, cognitive, and biological features

3. Proliferation of psychological treatment protocols for anxiety disorders – it's impossible to learn all existing single-disorder protocols.

Treatments for PTSD

- *Prolonged Exposure Therapy* (Foa et al., 2007)
- *Cognitive Processing Therapy* (Resick & Schnicke, 1992)
- *Cognitive Behavioral Conjoint Therapy* (Monson & Fredman, 2012)
- *Eye Movement Desensitization and Reprocessing* (Shapiro, 1995)
- *Stress Inoculation Training* (Meichenbaum, 1985)

Treatments for GAD

- *Cognitive Behavioral Treatment* (Dugas & Robichaud, 2007)
- *Applied Relaxation* (Borkovec et al., 1993)
- *Cognitive Behavioral Treatment* (Craske & Barlow, 2006)
- *Acceptance-Based Behavior Therapy* (Roemer et al., 2008)
- *Integrative Therapy for GAD* (Newman et al., 2008)
- *Metacognitive Therapy* (Wells, 2008)

4. Anxiety disorders often co-occur, making it difficult to know which disorder to focus on.

Comorbidity

- 43% of individuals with an anxiety disorder have an additional *current anxiety disorder*
- 54% of individuals with an anxiety disorder have an additional *lifetime anxiety disorder*
- 76% of individuals with an anxiety disorder have an additional *lifetime anxiety or mood disorder*

Brown et al., 2001

Percent with an Additional Anxiety Disorder

- Panic Disorder (53%)
- Panic Disorder with Agoraphobia (56%)
- Social Phobia (37%)
- Generalized Anxiety Disorder (71%)
- Obsessive Compulsive Disorder (45%)
- Specific Phobia (45%)
- Posttraumatic Stress Disorder (69%)

Brown et al., 2001

5. Treatments for different disorders overlap substantially.

Evidence-Based Treatments for Anxiety

- Exposure to feared situations, sensations, and cognitions
- Cognitive strategies (e.g., cognitive reappraisal, behavioral experiments)
- Reducing safety behaviors and compulsions
- Relaxation-based strategies (e.g., progressive muscle relaxation)
- Skills training (e.g., social skills, problem solving)
- Medications

More Arguments in Favor of Transdiagnostic Treatments

6. Disorders share many core features
7. Allows for treatment of transdiagnostic constructs (e.g., perfectionism), and symptoms that don't fall into neat categories
8. Lack of outcome studies for some presentations (e.g., fear of vomiting)
9. Difficulty to recruit homogeneous participants for group treatment

More Arguments in Favor of Transdiagnostic Treatments

10. In children, transdiagnostic approaches have been studied for years, and have been found to be useful.
11. Therapists are using transdiagnostic approaches in clinical practice. It is important to have data to assess whether these approaches work.

Cautions Regarding Transdiagnostic Treatments

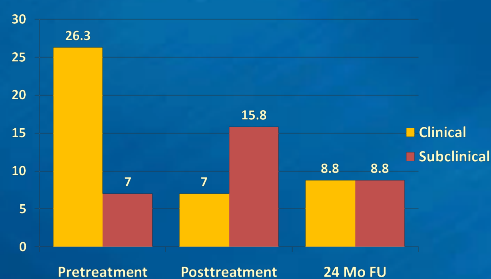
- Is it possible that transdiagnostic approaches are too watered down in an attempt to do too much in too little time?
- Limited research on transdiagnostic protocols (very few randomized controlled trials).
- No research comparing transdiagnostic approaches to disorder-specific protocols.

Cautions Regarding Transdiagnostic Treatments

- For which anxiety disorders are transdiagnostic treatment appropriate? For example, Erickson et al. (2009) have argued that certain disorders (e.g., OCD, PTSD) should not be treated using transdiagnostic protocols.
- Limited evidence that targeting comorbidity is necessary

Does Comorbidity Matter?

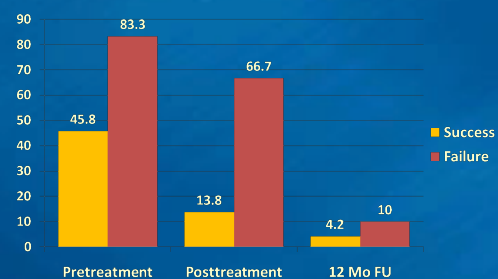
% of Panic Disorder Patients with Comorbid GAD



Brown, Antony, & Barlow (1995)

Does Comorbidity Matter?

% of GAD Patients with a Comorbid Diagnosis



Borkovec, Abel, & Newman (1995)

Does Comorbidity Matter?

- Treating one anxiety disorder often leads to improvements in other anxiety disorders and depression (though perhaps transdiagnostic treatments might lead to even better outcomes).
- Comorbid anxiety disorders often do not predict outcome.
- Other types of comorbidity (e.g., personality disorders, mood disorders) may impact on outcome.

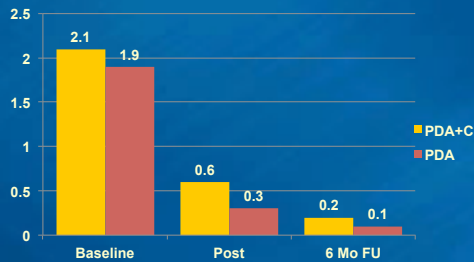
Comorbidity-Focused Treatment

- 65 patients with panic disorder with agoraphobia (PDA) were treated with either (1) CBT focused on PDA only, or (2) CBT focused on both PDA and their most severe comorbid disorder.
- Treatment conducted in small groups, for 12 sessions, focused on PDA, plus biweekly individual sessions focused either on PDA or another mood or anxiety disorder.

Craske et al. (2007). Cognitive-behavioral therapy for panic disorder and comorbidity: More of the same or less of more? *Behaviour Research and Therapy*, 45, 1095-1109.

Comorbidity-Focused Treatment

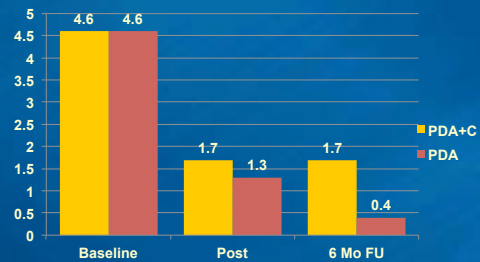
Mean Number of Comorbid Conditions



Craske et al. (2007)

Comorbidity-Focused Treatment

Severity of Most Severe Comorbid Diagnosis (0-8)



Craske et al. (2007)

Some Final Thoughts

- More strategies doesn't necessarily mean better outcomes (some strategies may cancel out the effects of others; some strategies may not add anything to treatment).
- Important not to ignore data from studies on single-disorder treatments (e.g., exposure for animal phobias; applied tension for blood phobia).
- Case formulation is important. CBT is a problem-focused treatment – it is important to prioritize problems and issues.

TRANSDIAGNOSTIC TREATMENT PROTOCOLS

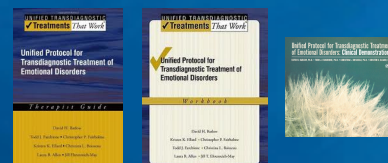
Barlow's Unified Protocol

- 12-18 individual therapy sessions, 50 to 60 minutes in duration.
- Sessions are weekly, though later sessions may be biweekly.
- Patients are encouraged to complete all 8 modules, even those that may not seem relevant.

(Barlow et al., 2011)

Unified Protocol for Emotional Disorders

- Barlow, D.H., Farchione, T.J., Fairholme, C.P., Ellard, K.K., Boisseau, C.I., Allen, L.B., & Ehrenreich-May, J.T. (2011). *Unified protocol for transdiagnostic treatment of emotional disorders* (therapist guide). New York, NY: Oxford University Press.
- Barlow, D.H., Ellard, K.K., Fairholme, C.P., Farchione, T.J., Boisseau, C.I., Allen, L.B., & Ehrenreich-May, J.T. (2011). *Unified protocol for transdiagnostic treatment of emotional disorders* (workbook). New York, NY: Oxford University Press.
- Barlow, D.H., Farchione, T.J., Boisseau, C.I., & Ellard, K.K. (2011). *Unified protocol for transdiagnostic treatment of emotional disorders: Clinical demonstrations* (DVD). Boston, MA: Boston University Productions.



Barlow's Unified Protocol

- **Module 1:** Motivation enhancement for treatment engagement
- **Module 2:** Psychoeducation and tracking of emotions
- **Module 3:** Emotion awareness training
- **Module 4:** Cognitive appraisal and reappraisal

(Barlow et al., 2011)

Barlow's Unified Protocol

- **Module 5:** Emotion avoidance and emotion-driven behaviors (EDBs)
- **Module 6:** Awareness and tolerance of physical sensations
- **Module 7:** Interoceptive and situational emotion exposures
- **Module 8:** Relapse prevention

(Barlow et al., 2011)

Unified Protocol – Module 1

Motivation Enhancement for Treatment Engagement

- **Duration:** 1 session
- **Focus:** Increasing readiness and motivation for behavior change, weighing pros and cons for changing vs. staying the same, articulating goals, and identifying steps for achieving goals.

(Barlow et al., 2011)

Unified Protocol – Module 2

Psychoeducation and tracking of emotional experiences

- **Duration:** 1-2 sessions
- **Focus:** Education on the nature of emotions, components of emotional experience, concept of learned responses; Monitoring of emotions, common triggers, and environmental contingencies.

(Barlow et al., 2011)

Unified Protocol – Module 3

Emotion Awareness Training

- **Duration:** 1-2 sessions
- **Focus:** Teaching patients to objectively observe emotional experiences (including thoughts, sensations, and behaviors) in the moment, using brief mindfulness and emotion induction exercises

(Barlow et al., 2011)

Unified Protocol – Module 4

Cognitive Appraisal and Reappraisal

- **Duration:** 1-2 sessions
- **Focus:** Patients learn to consider the role of maladaptive appraisals in their emotions, as well as strategies for changing maladaptive thinking patterns and appraising situations more flexibly.

(Barlow et al., 2011)

Unified Protocol – Module 5

Emotion Avoidance and Emotion Driven Behaviors

- *Duration:* 1-2 sessions
- *Focus:* Patient identifies patterns of emotion avoidance and emotion driven behaviors (EDBs), including subtle behavioral avoidance, cognitive avoidance, and reliance on safety signals.

(Barlow et al., 2011)

Unified Protocol – Module 6

Awareness and Tolerance of Physical Sensations

- *Duration:* 1 session
- *Focus:* Involves exposure to physical sensations that are typically associated with anxiety and distress, in order to better understand the relationship between physical sensations and thoughts/behaviors.

(Barlow et al., 2011)

Unified Protocol – Module 7

Interoceptive and Situation-Based Emotion Exposures

- *Duration:* 4-6 sessions
- *Focus:* Exposure to both internal and external emotional triggers, designed to increase emotional tolerance and contextual learning. Includes interoceptive, imaginal, and situational exposure.

(Barlow et al., 2011)

Unified Protocol – Module 8

Relapse Prevention

- *Duration:* 1 session
- *Focus:* Review of treatment concepts, discussion of progress, and identifying strategies for maintaining gains and preparing for future challenges.

(Barlow et al., 2011)

Unified Protocol - Findings

- 15 participants with a wide range of disorders completed treatment (3 dropped out).
- At posttreatment, 73% of participants were deemed to be responders, and 60% reached high end state functioning.
- At 6-month follow-up, 85% of participants were deemed to be responders, and 69% reached high end state functioning.

(Ellard et al., 2009)

Unified Protocol - Findings

- 37 participants with anxiety disorders received either immediate treatment with the unified protocol or delayed treatment after a 16-week waiting period.
- Treatment led to significant changes in severity, anxiety and depression symptoms, and impairment. Results were maintained at 6 month follow-up.
- Those in the waitlist control condition reported little to no change over 16 weeks.

(Farchione et al., 2012, *Behavior Therapy*)

Norton (2012) Protocol

- Designed for multiple anxiety disorders
- 12 weekly group sessions
- 2 hours each
- 6 to 8 clients
- 2 therapists

(Norton et al., 2012)

Norton (2012) Protocol

- Session 1 – Education and group socialization
- Session 2 – Education and introduction to cognitive restructuring
- Session 3 – Cognitive restructuring
- Sessions 4 through 9 – Exposure and response prevention (incorporating cognitive restructuring)
- Sessions 10 and 11 – Advanced cognitive restructuring of core beliefs
- Session 12 – Termination, relapse prevention

(Norton et al., 2012)

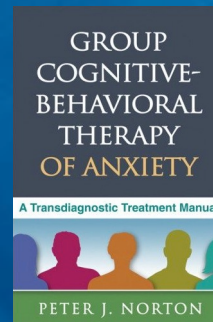
Norton (2012) Protocol

Additional Modules for Consideration (not included in Protocol)

- Motivational enhancement
- Relaxation training
- Mindfulness and acceptance skills
- Skills training

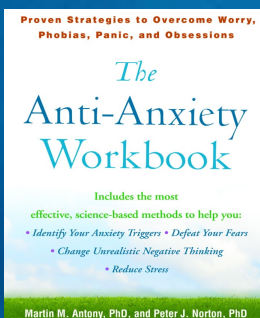
(Norton et al., 2012)

Norton (2012) Manual



Norton, P.J. (2012). *Cognitive-behavioral therapy for anxiety: A transdiagnostic treatment manual*. New York, NY: Guilford Press.

Anti-Anxiety Workbook



Antony, M.M., & Norton, P.J. (2009). *The anti-anxiety workbook: Proven strategies to overcome worry, panic, phobias, and obsessions*. New York, NY: Guilford Press.

Norton and Hope (2005) Study

- Conducted a trial ($n = 23$) comparing this treatment to a wait list control condition
- 67% of those in the treatment condition and 0% of those in the waitlist condition experienced a reduction in diagnostic severity to a subclinical level.
- Treatment was also associated with a reduction in depression.
- Not enough participants to look at analyses by individual diagnoses
- Findings supported in a subsequent study ($n = 52$, Norton, 2008)

Comparison with Relaxation

- 87 individuals (37 with social anxiety disorder, 31 with panic disorder, 15 with GAD, 4 with other anxiety disorders) received 12 weeks of transdiagnostic treatment or relaxation training.
- Both treatments led to statistically significant improvements, and there were no differences in outcome.
- Higher dropout rates were observed in the relaxation condition, despite no differences in treatment credibility.

Norton (2012). A randomized clinical trial of transdiagnostic cognitive-behavioral treatments for anxiety disorder by comparison to relaxation training. *Behavior Therapy*, 43, 506-517.

Comparison with Disorder-Specific Treatment

- Participants ($n = 46$) received transdiagnostic treatment or disorder-specific treatment for PD, SAD, or GAD.
- Strong evidence of treatment equivalence across conditions.
- No differences in treatment credibility.

Norton & Barrera (2012). Transdiagnostic versus diagnosis-specific CBT for anxiety disorders: A preliminary randomized controlled noninferiority trial. *Depression and Anxiety*, 29, 874-882.

Effects on Comorbidity

- Presence of comorbidity at pretreatment (64.6% of participants) did not predict changes in the principal diagnosis at posttreatment (following transdiagnostic treatment).
- 66.7% of patients with comorbid diagnoses at pretreatment no longer had clinically significant comorbidity at posttreatment.

Norton et al. (2013). Effect of transdiagnostic CBT for anxiety disorders on comorbid diagnoses. *Depression and Anxiety*, 30, 168-173.

Do Transdiagnostic Treatments Work for Anxiety Disorders?

- At least 7 independent research teams have developed transdiagnostic anxiety treatment protocols and reported preliminary outcomes.
- A meta-analysis based on the limited data available found that transdiagnostic treatments are associated with a very large pre- to post-treatment effect size, and stable maintenance of gains through follow up (Norton & Philipp, 2008).
- Need more controlled studies.

TRANSDIAGNOSTIC TREATMENTS IN PRACTICE

Core Features of Anxiety Disorders

- Anxiety cues and triggers (e.g., situational, interoceptive, and cognitive cues)
- Cognitive processes and biases (e.g., intolerance of uncertainty)
- Avoidance behaviors (e.g., situational, interoceptive, cognitive, and emotional avoidance)
- Physical symptoms and heightened arousal
- Compulsions and safety behaviors
- Skills deficits

Strategies for Targeting Core Features

Anxiety cues and triggers (e.g., situational, interoceptive, and cognitive cues)

Strategies:

- Identify anxiety cues and triggers (e.g., interviews, monitoring forms, questionnaires)

Panic Attack Record

Date _____ Time Began _____ AM/PM

☐ Expected Triggers _____

☐ Unexpected

Maximum Fear (circle)

0 1 2 3 4 5 6 7 8

None Mild Moderate Strong Extreme

Symptoms
(Check all symptoms present to at least a mild degree.)

<input type="checkbox"/> Difficulty Breathing	<input type="checkbox"/> Nausea/Abdominal Distress	<input type="checkbox"/> Unsteadiness/Dizziness/Faintness
<input type="checkbox"/> Racing/Pounding Heart	<input type="checkbox"/> Chest Pain/Discomfort	<input type="checkbox"/> Fear of Dying
<input type="checkbox"/> Choking	<input type="checkbox"/> Hot/Cold Flashes	<input type="checkbox"/> Fear of Losing Control/Going Crazy
<input type="checkbox"/> Numbness/Tingling	<input type="checkbox"/> Sweating	
<input type="checkbox"/> Trembling/Shaking	<input type="checkbox"/> Feelings of Unreality	

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Barlow & Craske (2007)

Strategies for Targeting Core Features

Cognitive processes and biases

Strategies:

- Cognitive reappraisal
- Behavioral experiments (hypothesis testing)
- Identifying and challenging meta-cognitions
- Identifying and challenging core beliefs and schemas

Strategies for Targeting Core Features

Avoidance behaviors (e.g., situational, interoceptive, cognitive, and emotional avoidance)

Strategies:

- In vivo (situational) exposure
- Interoceptive (symptom) exposure
- Exposure to imagery, thoughts, urges, emotions
- Virtual reality exposure
- Mindfulness and acceptance-based strategies

Strategies for Targeting Core Features

Physical symptoms and heightened arousal

Strategies:

- Applied relaxation
- Progressive muscle relaxation
- Breathing retraining
- Applied muscle tension (for preventing fainting in blood phobia)

Strategies for Targeting Core Features

Compulsions and safety behaviors

Strategies:

- Ritual (response) prevention
- Reducing safety behaviors

Strategies for Targeting Core Features

Skills deficits

Strategies:

- Social skills training
- Problem solving training
- Driving lessons

Other Factors in Anxiety Treatment

- Attitudes toward treatment (motivation, readiness for change)
- Low intellectual functioning
- Comorbidity with other conditions (e.g., substance use disorders, schizophrenia)
- Realistic stresses and triggers
- Financial resources and time available for treatment
- Family and environmental contributors
- Availability of social supports
- Perfectionism

CASE FORMULATION

Steps in Case Formulation

- List patient's main problems (e.g., anxiety, physical sensations, avoidance, etc.).
- Develop hypotheses about the predisposing, precipitating, perpetuating, and protective factors, based on cognitive and behavioral principles.
- Assess factors to confirm or disconfirm hypotheses (e.g., functional analysis).
- Develop a treatment plan based on case formulation.

Adapted from Taylor & Asmundson (2004)

Components of Case Formulation

- Triggers and cues
- Anxious thoughts and interpretations
- Dysfunctional core beliefs
- Life experiences, observations, etc.
- Proneness to panic attacks, fainting, or other physical reactions (and origins of unexplained body sensations)
- Use of anxiety-reducing behavior
- Other contributing factors
- Environmental reinforcers
- Family factors

Adapted from Abramowitz & Braddock (2008)

Example of Case Formulation

- Learning history (e.g., father's heart attack, being teased in childhood)
- Work stress (long hours; difficult coworkers)
- Belief that a racing heart is dangerous
- Belief that one must always make a positive impression on others
- Hypervigilance for physical arousal symptoms
- Hypervigilance for negative reactions from others
- Maladaptive coping behaviors (e.g., avoidance of exertion, avoidance of social situations, reassurance seeking, etc.)

Treatment Plan Based on Formulation

- Strategies for managing work stress (e.g., relaxation or mindfulness)
- Cognitive strategies for changing anxious beliefs (e.g., about physical arousal sensations, social situations)
- Exposure to feared sensations and situations
- Prevention of safety behaviors

Some Final Thoughts

- More strategies doesn't necessarily mean better outcomes (some strategies may cancel out the effects of others; some strategies may not add anything to treatment).
- Don't ignore data from studies on single-disorder treatments (e.g., exposure for animal phobias; applied tension for blood phobia).
- Case formulation is important. CBT is a problem-focused treatment – it is important to prioritize problems and issues.