ACT-Based Family Intervention for Adolescents with Anorexia Nervosa

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• Special thanks to Lisa Honeycutt, MA, James Herbert, PhD, Rebekah Teetsel

...and to all the families that are teaching us how to do this work
An invitation...

• To step into this space,
• in the service of something.
• Mud in a glass
• and mountain climbing...
Dying to be thin? (we think it’s about something else)

- Anorexia nervosa (AN) is a devastating condition in which behavior is so profoundly narrow, rigid and disconnected from experience that individuals are not able to meet basic needs
  - Highest mortality rate of any psychiatric illness
  - 4-20% of individuals with AN will die prematurely as a result of self-imposed starvation or suicide
STATE OF THE UNION
Empirically Supported Treatments (ESTs) for Anorexia Nervosa
Cognitive Behavioral Therapy-Enhanced (CBT-E)

Fig. 2. A schematic representation of the extended cognitive behavioural theory of the maintenance of bulimia nervosa. ‘Life’ is shorthand for interpersonal life.
CBT and CBT-E for AN

• Ego-syntonic nature of disorder
  – Attempts at direct change of thoughts are often met with resistance
  – Often less credible/acceptable
• Behavior is rewarding in short-term
• Relies on very verbal ways of knowing (not experiential)
• Use of distraction and other strategies may reinforce avoidance
• In adolescents  -> no real trials for CBT
And how’s it going

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Group Size</th>
<th>Rate of Outcome (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Mortality</td>
<td>5,334</td>
<td>5.0</td>
</tr>
<tr>
<td>Recovery</td>
<td>4,575</td>
<td>46.9</td>
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<tr>
<td>Improvement</td>
<td>4,472</td>
<td>33.5</td>
</tr>
<tr>
<td>Chronicity</td>
<td>4,927</td>
<td>20.8</td>
</tr>
<tr>
<td>Symptom normalization</td>
<td></td>
<td></td>
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<tr>
<td>Weight</td>
<td>2,245</td>
<td>59.6</td>
</tr>
<tr>
<td>Menstruation</td>
<td>2,719</td>
<td>57.0</td>
</tr>
<tr>
<td>Eating behavior</td>
<td>1,980</td>
<td>46.8</td>
</tr>
<tr>
<td>Affective disorder</td>
<td>1,972</td>
<td>24.1</td>
</tr>
<tr>
<td>Neurotic or anxiety disorder</td>
<td>1,478</td>
<td>25.5</td>
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<tr>
<td>Obsessive-compulsive disorder</td>
<td>992</td>
<td>12.0</td>
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<tr>
<td>Schizophrenia</td>
<td>1,097</td>
<td>4.6</td>
</tr>
<tr>
<td>Personality disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unspecified or borderline</td>
<td>1,115</td>
<td>17.4</td>
</tr>
<tr>
<td>Histrionic</td>
<td>308</td>
<td>16.6</td>
</tr>
<tr>
<td>Obsessive-compulsive</td>
<td>202</td>
<td>31.4</td>
</tr>
<tr>
<td>Substance abuse disorder</td>
<td>627</td>
<td>14.6</td>
</tr>
</tbody>
</table>

Family-Based Treatment

- Phase I: Refeeding the patient
- Phase II: Negotiations for a new pattern of relationships
- Phase III: Adolescent issues and termination
  - e.g., Maudsley Approach
Family-Based Treatment

• Effective for many families
  – Exception is those high in expressed emotion
• Best for adolescents with a short duration of the disorder; LT outcomes unknown
• Lack of focus on underlying etiological or maintenance factors
Cumulative Prevalance Rates
Adolescence: Essential Time to Intervene

- Decrease in gray matter in prefrontal regions of the brain
- Changes in dopaminergic activity
- Increase in myelination in pre-frontal cortex
- Increase in connections across cortical and sub-cortical areas

better coordination of emotions and cognitions over the period of adolescence

Steinberg, 2009
Best time to intervene, but are we intervening in the best way?
• Pause
What it’s like to be in the room

- Sampling the therapist’s experience
• Reactions
Slip inside the skin...

• Sample the experience of a parent of a child with anorexia nervosa
• PAUSE, BREATHE
Slip inside the skin...

- Sample the experience of the adolescent with anorexia nervosa
Something is really wrong with you.
How do you protect yourself?

- Being stripped of your armor
- Get what it would be like to have something taken away from you... the only thing that has provided you with a sense of pride, comfort, safety, reprieve.
The functional nature of the ED

• So EDs are coping strategies, they’re functional
• Cope with what? The narratives
  • *Anorexia, my friend . . . you are the source of my security, my guard . . .*
  • *I really need you to provide direction in everything I do.*
  • *You let me hide from things I know that I can’t deal with…*
  • *Anorexia, you make me feel special…*
• -> AN provides sense of safety, predictability, mastery and control, eliminates ambiguity, etc -> attenuates negative and promotes positive feelings.
Racing against the clock

• Why you can’t just treat the adolescent;
  Inclusion of parents in treatment

• Deal w/ safety issue in session with parents,
  allows the therapist to be more present with
  the adolescent
Short term health consequences
- Weight loss
- Amenorrhea
- Thinning hair
- Lanugo
- Carotinemia
- ANS down-regulation
- Acrocytosis
- Edema
- Hyperactivity
- Hypokalemia

Long term health consequences
- Osteoporosis/osteopenia
- Fertility issues
- Cognitive impairment
- Death
• BREAK
Summary

• Effective treatments sparse without long-term outcomes
• Know it’s important to include parents, but unclear how
• Need to address features with prognostic significance and functional nature of symptoms
ACT

• Emphasis is on the function of behavior and workability, including but not limited to, the ED.
• Goal is to increase psychological flexibility, i.e., ability to contact the present moment, fully and without defense, and cease or persist in behaviors that would be effective given one’s values and what the environment affords.
ACT in a question...

Contact with the Present Moment at this time, in this situation?

Acceptance

Values

Defusion

Values

Psychological Flexibility

Voluntary Values

if the answer is “yes” that’s

AND do what takes you in the direction

Committed Action

Given a distinction between you & the stuff you are struggling with and trying to change

Self as Context

are you willing to have that stuff, fully and without defense

Acceptance

as it is, and not as what it says it is,

Acceptance
Contact with the Present Moment

Open

Centered

Engaged

Acceptance

Values

Defusion

Committed Action

Self as Context

psychological flexibility
Contact with the Present Moment

Acceptance and Mindfulness Processes

Acceptance

Defusion

Self as Context

Values

Committed Action
Contact with the Present Moment

Commitment and Behavior Change Processes

Acceptance

Values

Defusion

Committed Action

Self as Context
Acceptance-based Separated Family Therapy (ASFT)

- Separated Family treatment
  - High EE, caregiver burden, assoc features
  - Adolescent and parent have different needs
- Adolescent ➔ ACT presented in individual format
- Parent ➔ *Off the C.U.F.F.* parent skills program (Zucker, 2006) enhanced by ACT
- 20 sessions over 6 mths
  - 16 separated
  - 4 conjoint (biweekly)
ASFT Overview

Module 1: Setting the Stage for Treatment

Module 2: Functional Analysis

Module 3: Openness
Module 3: Centered
Module 3: Engaged

Module 4: Behaving Flexibly

Module 5: Conjoint Sessions
MODULE 1: Setting the Stage

- Therapeutic relationship in ACT
- Values as compass in the most general sense
- **Adolescent:**
  - Thoughts/feelings about treatment HW (begin to facilitate observation/openness)
  - Creative representation of self HW (foundation for values, self-as-context)
- **Parents:**
  - Activating the family, observing values/barriers/urges, and strengthening the parent team
  - Teaching ED as coping, the dance of parenting, CUFF style, targets and principles of behavior change
**MODULE 2**

**ED as Avoidance: Tools for Functional Assessment**

- Adolescent Timeline

<table>
<thead>
<tr>
<th></th>
<th>Positive Reinforcers</th>
<th>Negative Reinforcers</th>
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<tbody>
<tr>
<td><strong>Internal</strong></td>
<td>Provided a sense of control, safety, predictability, or dependability; Organized the world; Increased sense of mastery or pride (felt special, moral, or dominant)</td>
<td>Reduced painful or uncomfortable affective experiences, such as guilt or shame; Reduced ambiguity, chaos, feelings of ineffectiveness or low self-worth</td>
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<td><strong>External</strong></td>
<td>Was the source of compliments, attention, envy or adoration of others. Lead to increased care-taking from others</td>
<td>Took away uncomfortable sexual attention, weight-related teasing, isolation, or responsibility</td>
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Noticing ED Volume

For the next week, take time to notice when your eating disorder thoughts are the loudest and when they are quieter. Note the situation you were in, the volume of your ED, and any associated thoughts and feelings you can identify.

<table>
<thead>
<tr>
<th>Situation (Time/Date/Location)</th>
<th>Volume</th>
<th>Thoughts</th>
<th>Feelings</th>
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Give a score (ranging from 1-10) for the volume of the ED for the situation you are writing about.

A score of 10 would indicate that the ED volume is very loud, screaming at you.

A score of 1 would indicate that the ED volume is very low. It is still there, you might hear a little muffled voice, but it is much quieter, just sort of there in the background.
Assessment is informed by Parents

- A key parent tool for understanding and intervening upon their child’s ED: *The Eating Disorder Wave*
Broadening our view

• Expand to functional *classes* of avoided events and avoidant repertoire.
  – Food/eating takes on the psychological function of other painful content and is thus aversive
  – What would you rather think about...

• 801, cards exercise/role play, case example (AL)
Long-Term Costs

- Explore the limits of system, how it has gotten in the way (if it has).
Stuck

EMOTIONAL AVOIDANCE DETOUR
Stuck
Difficult thoughts, feelings, bodily sensations
(e.g., the thought “I am fat and no one will like me,” feelings of worthlessness, stomach tightness, anxiety)

Behaviors aimed at decreasing contact with these private events
(e.g., following dietary rules, avoiding social situations, Achieve, achieve, achieve, ...)

The System that traps

Short-term relief
(e.g., Feel successful, a moment of respite)

Long-term costs
Refining the Contract

• Build a therapeutic contract around something that is personally meaningful to him/her
MODULE 3
Open, Centered, Engaged ADOLESCENTS

• Teach observation and acceptance of experience (as it unfolds in the present moment), identifying valued-directions and active choosing.

• Build a sense of self that is independent of content.
What we aiming for, in each moment...

are you willing to have that stuff, fully and without defense Acceptance

if the answer is “yes” that’s

Defusion as it is, and not as what it says it is,

Psychological Flexibility

Contact with the Present Moment at this time, in this situation?

of your chosen Values

AND do what takes you in the direction Committed Action

Given a distinction between you & the stuff you are struggling with and trying to change

Self as Context
Contact with the Present Moment
Open
Centered
Engaged
Acceptance
Defusion
Self as Context
Values
Commit Action
psychological flexibility
Observing Your Waves...

(Pick a situation that was upsetting. Use the boxes to describe the thoughts you had, the feelings you experienced, and any urges you noticed as your emotion was rising)

Values, a place to stand.
Instructions:
In each box along the wave record the thoughts, feelings and bodily sensations, you noticed. As you go along the wave, take note of how strong the urge is for you to “jump off” the wave. In other words, how hard are you struggling to avoid having the thoughts and feelings you are experiencing.

Undercurrent

Describe the Situation

What was the Volume?
“See... That's the stuff I was talking about.”
Bad News Radio!

Giving you nothing but the best, all day long, NON-STOP ROCK!
Which Path Will You Choose in This Moment?

Old, familiar, leads to here.

New, feared, but vital, meaningful.
• Pause
PARENT SKILLS

(OFF THE CUFF ACT-IFIED)
Core Skills: Surfing

Staying focused on the value-guided direction

The beach

Moderate emotional intensity

High emotional intensity

Top of the wave

Emotional intensity increases

Rational cognition decreases
Values and Self-Awareness

Diagram:
- Determining Valued Direction
- Self-Awareness (preferences, dislikes)
- Elaboration of Visceral States
- Abstract
  vs.
- Determining Valued Direction
- Self-Awareness (preferences, dislikes)
- Elaboration of Visceral States
- Parents as Role Models
Perfectionism and Values
Reinforcement

- Extinction of Eating Disorder Symptoms
- Differential Reinforcement of Other Behaviors
**Reminders:**

Our initial targets are behaviors that directly interfere your child’s health. Thus, you may choose to address one or more of the following behaviors:

- Doesn’t eat enough
- Exercises too much or too intensely
- Throws up
- Uses laxatives, diet pills, etc.
- Completely avoids necessary foodstuffs (e.g., fats)

Remember, your child’s eating disorder helps her cope. Thus, in order to address the eating disorder, we have to help your child approach situations that bring up difficult thoughts/feelings and provide her with tools to respond more effectively to them. Situations that may be difficult for your child, because they bring up self-consciousness, guilt or some other unwanted internal experience, include:

- Calling to initiate plans
- Saying ‘No’
- Stopping a task before it is “perfect”
- Expressing opinions
- Engaging in “play”

Remember, as parents, you are ROLE MODELS for your children. Thus, one of your best ways to encourage healthy approach behavior is to do it yourself. A key area in which you role model, is self-care AND self-care is necessary to care for others.

<table>
<thead>
<tr>
<th>My Value (My Guide):</th>
<th>Week Of</th>
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</table>

**Specific plan to address unhealthy behavior** (this might include a family meeting, logical consequences, appealing to your child’s inner wisdom, ignoring, or some combination of strategies)

**Specific plan for self-care**

**Difficult thoughts and feelings that I am willing to experience in order to move in my valued direction**

**New this week...**

This is your first homework sheet! Each week, this space will be filled with reminders about the topics you have just read about. We will put your weekly goals in this space, as a reminder of those skills we want you to practice throughout the week. For now, just focus on completing this sheet throughout the week!
Plan Results

**Addressing Unhealthy Behavior in My Child** (attach an additional sheet if necessary)

<table>
<thead>
<tr>
<th>Date/Time Situation</th>
<th>What I did to address the behavior</th>
<th>Difficult thoughts/feelings/urges that I experienced</th>
<th>Degree of willingness to experience these things (0-10; 0 = not willing at all)</th>
<th>What I learned, and if necessary, what I will do differently next time</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

*It's a Process:*
*Try, Tweak, Learn, Grow*

**My Self-Care**

Tell us about your self-care behaviors this week (or, if you didn't do it, what got in the way).
Open, Centered, Engaged PARENTS

• Purpose
  – To address ED behaviors
  – To be role models
  – To directly shape healthy (approach-based) coping in their child
Addressing barriers to implementing parent skills

- ACT wrap around

1. CHOOSE
2. MOVE
3. EXPOSURE
   - DEFUSION
   - ACCEPTANCE
   - MINDFULNESS

Behavioral Trajectory

Negatives thoughts, feelings, bodily states, memories, competing behavioral predispositions, confusion, ambiguity...
MODULE 4: Behaving Flexibly

• Building broader and broader repertoires of effective action
  – adolescent takes increasing responsibility
  – in-session symbolic approach activity (S10)
  – add healthy coping to parent sheet
MODULE 3: Conjoint Sessions

• Structure and content
• Other issues
  – Blind versus nonblind weight
  – Function of parents’ “need to know”
  – Session order – parent vs. adolescent
• Experiential exercise (or role play) with discussion of components of the hexaflex, targets and strategies
ACT Model of Problems in Living

Contact with the Present Moment
- Dominance of the conceptualized feared future & regretted past

Acceptance
- Experiential avoidance

Defusion
- Cognitive fusion

Values
- Lack of values clarity; Dominance of pliance and avoidant tracking; values avoidance; values as burden

Committed Action
- Inaction, impulsivity, or avoidant persistence

Self as Context
- Attachment to conceptualized self; Impoverished sense of self

psychological inflexibility
The ACT Therapeutic Model

- **Contact with the Present Moment**: On-going, nonjudgmental contact with psychological & environmental events as they occur.

- **Acceptance**: Active embrace of thoughts, feelings, bodily sensations.

- **Defusion**: Decreasing the literal quality of thought; Recognizing the process, not just the product.

- **Values**: Chosen qualities of purposeful action, instantiated moment by moment.

- **Committed Action**: Building patterns of effective action linked to chosen values.

- **Self as Context**: Locus or perspective from which private events are experienced.

**Psychological Flexibility**
Hexaflex and AN: Some Unique Issues

- Values
- Self-as-context
- Staying in the present moment
- **More at Panel Discussion tomorrow**
Conditioned aversives in the therapy room

• Observing behavior in session
  – Patient
  – Therapist
• Imagine your most difficult patient
ASFT

• Phase I: Development of treatment manuals/materials

• Phase II: Recruitment of 6 families to pilot and refine intervention

• Phase III: Recruitment of an additional 16 families to test effectiveness (incl feasibility, acceptability, effect size estimates to power larger trial)
ASFT Enrollment

– **Inclusion criteria**
  - Aged 11-18
  - Meets criteria for AN
  - Appropriate for outpatient care
  - At least average intellectual functioning
  - Living at home

– **Exclusion criteria**
  - Actively suicidal
  - Psychosis, current substance abuse
  - Learning disability or PDD

<table>
<thead>
<tr>
<th>26 adolescents screened</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 met study criteria</td>
</tr>
<tr>
<td>11 signed consent and completed baseline assessment</td>
</tr>
<tr>
<td>6 continued to active treatment (Cohort 1)</td>
</tr>
</tbody>
</table>
Description of First 4 Participants

◊ Age range 12-16
◊ Variety of family structures
◊ Treatment familiar and naive

<table>
<thead>
<tr>
<th>EDE Subscales – Adolescent (Parent Report)</th>
<th>Restraint</th>
<th>Eating Concerns</th>
<th>Weight Concerns</th>
<th>Shape Concerns</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>801</td>
<td>2.20 (3.60)</td>
<td>0.20 (1.20)</td>
<td>0.00 (1.25)</td>
<td>0.38 (1.50)</td>
<td>0.69 (1.89)</td>
</tr>
<tr>
<td>804</td>
<td>3.80 (3.80)</td>
<td>1.20 (1.40)</td>
<td>3.60 (3.50)</td>
<td>2.63 (3.25)</td>
<td>2.81 (2.99)</td>
</tr>
<tr>
<td>807</td>
<td>4.00 (3.60)</td>
<td>1.20 (0.00)</td>
<td>3.20 (1.50)</td>
<td>3.88 (2.63)</td>
<td>3.07 (1.93)</td>
</tr>
<tr>
<td>810</td>
<td>5.80 (4.60)</td>
<td>1.50 (2.40)</td>
<td>1.50 (1.25)</td>
<td>4.63 (3.25)</td>
<td>3.36 (2.88)</td>
</tr>
</tbody>
</table>
STAY TUNED.

Contact us.

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CTimko@Towson.edu
Nancy.zucker@duke.edu
A review...

• What features of AN are particularly well-matched to acceptance-based strategies?
  – Acceptance-based strategies address avoidance and control of emotions and other motivational states common among indv with AN. These strategies might also be well-matched to this patient population given the ego-syntonic nature of the symptoms and the emphasis on experiential (rather than verbal ways of knowing).

• What are the core components of the protocol designed to treat adolescents with AN?
  – ACT based individual therapy for the adolescent.
  – Parent skills training within an ACT framework.
  – Setting the stage for treatment, functional assessment, open/centered/engaged, behaving flexibly, conjoint sessions.

• What is one strategy or exercise adapted for use with this population?
  – Timeline used for functional assessment.
  – Wave as metaphor for observing internal experience.