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Can Acceptance and Commitment Therapy (ACT) Improve Adherence to Eating and Weight Loss Goals?

Objectives:

1. Understand existing evidence supporting the efficacy of ACT strategies in facilitating behavioral adherence.
2. Identify the components of the ACT treatment model.
3. Practice ACT-based techniques that could be incorporated into obesity treatment.
CE Credits

- Villanova University College of Nursing is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center Commission on Accreditation.
- Villanova University College of Nursing Continuing Education/COPE is a Continuing Professional Education (CPE) Accredited Provider with the Commission on Dietetic Registration.
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Can Acceptance and Commitment Therapy (ACT) Improve Adherence to Eating and Weight Loss Goals?

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Overview

- Overview of Acceptance and Commitment Therapy (ACT) treatment model
- ACT may enhance weight loss
  - Brief interventions
  - ACT-based behavioral weight loss programs
- Applying ACT to weight loss treatment: practical examples
**ACT: TREATMENT MODEL**

Acceptance and Commitment Therapy

- Cognitive-behavioral therapy tradition
  - Behavior therapies
  - Cognitive therapies
  - Acceptance-based therapies
- Basis in learning and cognitive theories

Hayes & Strosahl, 1999; Guilford; Hayes et al., 2006, *Behav Res Ther*.

Acceptance and Commitment Therapy

- Psychopathology is a result of *experiential avoidance*
  - Attempts to control unpleasant thoughts and feelings do not work

Hayes & Strosahl, 1999; Guilford; Hayes et al., 2006, *Behav Res Ther*.
Acceptance and Commitment Therapy

- Psychopathology is a result of **experiential avoidance**
  - Attempts to control unpleasant thoughts and feelings do not work
  - Unwillingness to have unpleasant thoughts/feelings
    - Takes us out of the present moment
    - Limits our ability to engage in valued activities


ACT Therapeutic Model

- Present Moment
  - On-going, non-judgmental contact with psychological & environmental events as they occur

- Acceptance
  - Active embrace of thoughts, feelings, bodily sensations

- Values
  - Clear, freely-chosen life directions

- Defusion
  - Thoughts are not to be taken literally
  - Thoughts do not determine behavior

- Committed Action
  - Self as context or perspective from which private events are experienced, not their content
  - Building patterns of effective action linked to chosen values

- Self as Context
  - Clear, freely-chosen life directions

- Psychological Flexibility
  - On-going, non-judgmental contact with psychological & environmental events as they occur

ACT Therapeutic Model

- Present Moment
  - 1) Given a distinction between you and the stuff you are struggling with and trying to change
  - 2) Are you willing to have that stuff fully and without defense
  - 3) As it is, and not as what it says it is
  - 4) AND do what takes you in the direction
  - 5) Of your chosen values
  - 6) At this time, in this situation?
ACT FOR WEIGHT LOSS

Lifestyle Modification Programs

- Reduce calorie intake
- Reduce consumption of high-calorie foods
- Increase consumption of low-calorie foods
- Increase physical activity
- Reduce sedentary behaviors
- Behavioral strategies
  - Self-monitoring (food, exercise, weight)
  - Goal-setting, problem-solving
  - Stimulus control

e.g., Ryan, Espeland, Foster, et al., 2013, Control Clin Trials.

Weight Loss Barriers

- Tendency to consume high calorie foods when available (neurobiological, learned)$^1$
- The current food/exercise environment$^2$
- Limited awareness of food decisions$^3$
- “Healthy” choices predicted/perceived to be less pleasurable$^4$

$^1$Finlayson et al., 2008, Appetite;
$^2$Wansink, 2004, Annu Rev Nutr;
$^3$Wansink & Sobal, 2007, Environ Behav;
$^4$Forman & Butryn, 2015, Eat Behav.
How Might ACT Target Barriers?

• Mindfulness
  • Improve awareness of reactions to food cues
  • Improve awareness of internal states
    • Hunger/satiety
    • Emotions
    • Thoughts about food or physical activity

ACT FOR WEIGHT LOSS:
CURRENT EVIDENCE

How Might ACT Target Barriers?

• Acceptance/Defusion
  • Unpair eating from cravings, urges to eat, thoughts about food, and negative emotional states
  • Increase willingness to forgo a choice that is perceived as more pleasurable

• Values
  • Enhance intrinsic motivation
Current Evidence

- Mindfulness-based treatments
- Analogue studies
- ACT workshops
- Uncontrolled trials/ brief interventions
- Randomized controlled trials

Mindfulness-Based Treatments

Mindfulness-based Weight Loss Programs

- Mixed efficacy of mindfulness for behavioral weight loss¹
- Differential benefit of general vs. eating-specific awareness
- Awareness alone may not confer additional benefit

¹Olson and Emery, 2015, Psychosom Med
Workshops

ACT Workshops

- Additional weight loss after previous completion of a weight loss program (6-hour ACT workshop)\textsuperscript{1}
- Greater weight loss and increases in physical activity in women attempting to lose weight (four 2-hour ACT workshops)\textsuperscript{2}

\textsuperscript{1}Lillis et al., 2009, Ann Behav Med; \textsuperscript{2}Tapper et al., 2009, Appetite

ACT for Physical Activity

- Two, 2-hour workshops (week 2 & 4)
  - ACT
  - Psychoeducation
  - \( N = 54 \) undergraduates
- Outcome: Athletic center visits
  - Week 1 (baseline)
  - Week 5 (post)
  - Week 8 (follow-up)

ACT for Physical Activity

- Larger increase in the ACT group at post ($F(1,42) = 7.33, p < .01, \eta^2 = .15$)
- Partially maintained at follow-up ($F(1,42) = 2.91, p = .09, \eta^2 = .07$).


ACT-Based Treatments

Preliminary Trials

- Open trials
  - 7.9 kg loss after 12 weeks, additional weight loss (1.7kg) by month six\(^1\)
  - 12.0 kg loss in disinhibited eaters after 24 weeks, maintained at month three\(^2\)
- Brief (8 sessions) controlled trial for weight gain prevention
  - 2.2 kg loss at 1-year follow up, compared to 1.1 kg gain in control\(^3\)

\(^1\)Forman et al., 2009, Cogn Behav Pract
\(^2\)Niemier et al., 2007, Obesity
\(^3\)Katterman et al., 2013, J Contextual Behav Sci
First Randomized Controlled Trial

• Compared group standard behavioral treatment (SBT) to acceptance-based behavioral treatment (ABT)
• 40-weeks (30 sessions)
• ABT included standard behavioral protocol plus segments focusing on ACT-based skills

Forman, Butryn, Juarascio, Bradley, Lowe, Herbert, & Shaw, 2013, *Obesity*

Participants

• \(N = 128\) (\(N_{\text{post}} = 117\), \(N_{\text{follow up}} = 82\))
• BMI: 34.1 ± 3.6 kg/m\(^2\)
• Age: 45.7 ± 12.8 years
• Race:
  • 62.3% Caucasian
  • 24.6% African American
  • 3.8% Hispanic
  • 1.6% Asian

Forman, Butryn, Juarascio, Bradley, Lowe, Herbert, & Shaw, 2013, *Obesity*

ABT vs. SBT for Weight Loss: Results

- Difference not significant at post (\(p = .24\)) or follow-up (\(p = .37\))

Forman et al., 2013, *Obesity*
ABT vs. SBT for weight loss: Moderation

<table>
<thead>
<tr>
<th>Weight Loss (kg) at Post-treatment</th>
<th>ABT</th>
<th>SBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Depression**</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>High Emotional Eating*</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>High Food Responsivity°</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>High Disinhibition°</td>
<td>18</td>
<td>16</td>
</tr>
</tbody>
</table>

\[ p < .10^*, p < .05^*, 	ext{or} p < .01^{**} \]

ABT vs. SBT for Weight Loss: Conclusions
- Advantage of ACT was small and did not reach statistical significance
- Considerations
  - Attrition/sample size
  - Length of follow up period
  - Was a sufficient dosage of ACT delivered?

Second Randomized Controlled Trial
- Compared group SBT to ABT
- 52-weeks (25 sessions)
- ABT protocol modified to increase dosage and integration of ACT-based skills
Participants

- \( N = 190 \ (N_{Post} = 149) \)
- BMI: 36.9 ± 5.8 kg/m\(^2\)
- Age: 51.6 ± 10.1 years
- Race:
  - 70.5% Caucasian
  - 24.7% African American
  - 3.7% Hispanic
  - 1.1% Asian

Second RCT Comparing ABT to SBT

- Significant effect of condition \((p = .01)\)

ABT vs. SBT for Weight Loss:

Conclusions

- ABT produced significantly greater weight loss at the end of a 1-year program
- Revised ABT program included greater focus on ACT skills, especially willingness and acceptance of loss of pleasure
- Considerations
  - Replication with follow-up
  - Dissemination
APPLYING ACT TO WEIGHT LOSS TREATMENT: SAMPLE EXERCISES

“Control What You Can, Accept What You Can’t”
• Minimizing contact with problem cues and experiential avoidance are not the same
• DO still use behavioral strategies like stimulus control
• BUT it’s impossible to avoid problem cues all of the time

Acceptance
• Have you been waiting for change to be easy?
• Willingness
  • To move towards my value of _____, I have to be willing to have _____.
  • If you’re not willing to have it, you will.
Mindfulness

• “Paying attention on purpose, in the present moment, and nonjudgmentally, to the unfolding of experience moment to moment” (Jon Kabat-Zinn).

Mindful Eating

1. Turn off/tune out from the outside world
2. Focus your attention on the food
   • Notice sight and smell
   • Notice taste and texture
3. Eat slowly
4. Notice what you do while you eat (habits)
5. Tune in to the inside world (thoughts, feelings, internal sensations)

• Pay attention to your eating experience
• Pay attention to your eating decisions
### Mindful Decision-Making

- Increase awareness that an eating/exercise decision is being made
- Notice the external (e.g., food cues) and internal experiences (e.g., thoughts, emotions, physical sensations) that may influence your decision-making
- Bring to mind your short- and long-term goals and values

### Values Clarity

- Values as freely-chosen life directions
- Clarity: “a good parent” vs. “a parent who listens openly and respects their child’s opinions”
- How are your values related to your weight loss goals?
  - Why is weight loss important to you right now?
  - What are you hoping will be different in your life if you lose this weight/make healthier eating choices/exercise more?

### Commitment to Valued Action

- Picture yourself 5 years from now living a life more consistent with your most important values. *What can you start doing now to make that outcome more likely?*
- “Does doing X move me towards or away from my most important values?”
Defusion
- Separate your actions from your thoughts about those actions
- "I can't pick up the pen"
- Reason-giving
  - "I can't (or I have to) _____ because…” can interfere with weight loss
- Practice exercises:
  - "But" vs. "and"
  - Carrot vs. chocolate

Urge Surfing
- Mindfulness, acceptance, and defusion
- "Surf the urge" of your craving
  - When you experience a strong craving, tune into it and notice your experience (without reacting to it)
  - Strength of craving
  - Thoughts, emotions, sensations
  - Cravings typically rise and fall, like a wave.

What Does ACT Bring to Weight Loss?
- ACT strategies may not make weight loss easier, but could help patients adhere to their goals when it is difficult.
- Tools for responding differently to thoughts, emotions, and sensations that might otherwise interfere with behavior change
- Clearer connection between healthy behaviors and values may increase motivation to maintain those behaviors
Books on ACT for Weight Loss


References

References


Evaluations and CE Certificates

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Complete the evaluation soon after you receive the email. The evaluation does expire after 3 weeks. Once expired, you cannot obtain a certificate.

Once the evaluation is completed, the certificate will be emailed separately within 2 or 3 business days.
Questions and Answers

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