### Intentional Behavioral Change: A Cognitive-Behavioral Model

#### Bruce H. Young, LCSW National Center for PTSD

#### Nebraska Disaster Behavioral Health Conference July 14-15, 2005

## **Overview of Presentation**

- 1. Defining cognitive-behavioral therapy (CBT).
- 2. Historical roots and rationale of CBT.
- 3. Which is primary: emotion or cognition?
- 4. CBT: Current findings
- 5. New CBT paradigms
- 6. Intentional Behavioral Change: A CBT model

# What is Cognitive-Behavioral Therapy (CBT)?

## Defining CBT

No one standard accepted definition... several referents, e.g.,

- Cognitive-behavioral therapy
- Cognitive therapy
- Cognitive mediational therapy
- Cognitive restructuring / reframing

## Defining CBT

Form of psychological therapy directly focusing on modifying both cognitive processes and behavior to reduce or eliminate problematic behavior.

## What is meant by cognitive process?

A representational state that can be semantically evaluated -- as true or false, accurate or inaccurate -- rules, heuristics, or schemata governing the operation of such representational states, as they are held to be involved in receiving, processing, and storing information.



### "Words are the physician of a mind diseased."

#### Aeschylus Greek philosopher

2005 Disaster Behavioral Health Conference



#### Kelly's constructive alternativism

Method of negotiating and renegotiating meanings by the mediation of narrative interpretation.

#### Contemporary issues: Cognition and emotion

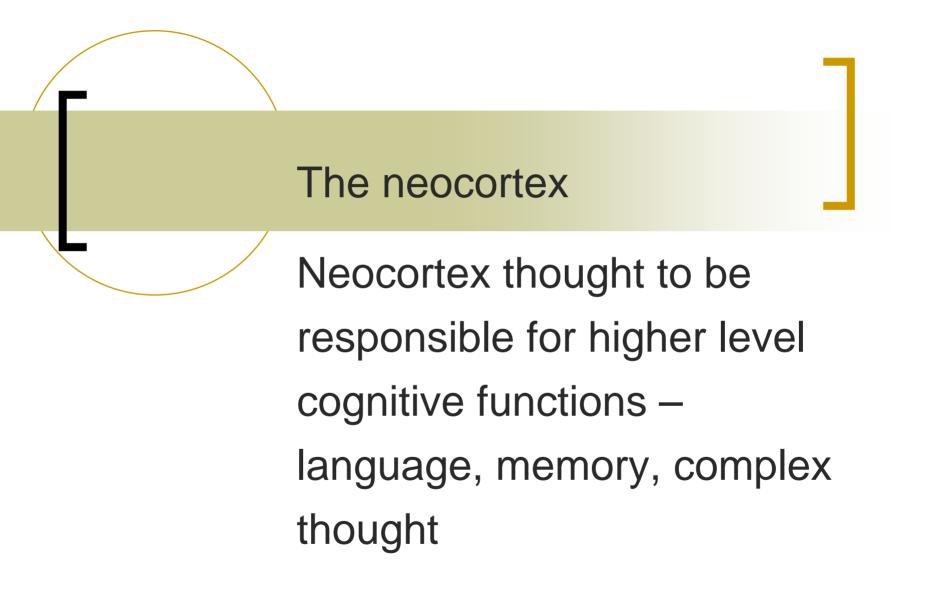
Which has primacy?...

Does cognition create emotion with the implication ... change the cognition and change the emotion? The limbic system

Group of brain structures including:
connections with each other
connections with hypothalamus
connections with other areas.



# The limbic system largely associated with emotions.







 Affective reactions are possible without cognition

 Affective preferences exist without cognitive awareness

Affective preferences persevere even if the cognition that gave rise to those preferences is invalidated

#### How is CBT tied to behaviorism?

Use of conditioning techniques for learning new behavior (e.g., use of systematic desensitization, where a stimulus that causes anxiety is paired with a pleasant one

Positive clinical outcomes tied to empirical change of behavior (as opposed to a type of change viewed by behaviorists as reification of abstract concepts, e.g., self-psychology). Compared symptom course of 10 female victims of rape or aggravated assault who received a 4 session **cognitive-behavioral intervention** shortly after their assault with that of 10 **assessment-only** control victims

Foa, E., Hearst-Ikeda, D., & Perry, K. (1995). Journal of Consulting and Clinical Psychology, 63, 948-955.

Two months after the assault, victims receiving CBT reported experiencing significantly fewer symptoms of PTSD than did assessment control participants.

At a 5.5 month follow-up assessment, participants in the treatment condition reported significantly fewer symptoms of depression, although there were no differences between groups with respect to PTSD symptoms.



- 24 MVA patients with ASD
- Intervention within 2 weeks of trauma

# ½ received 5 sessions <u>Supportive Counseling</u> ½ received 5 sessions <u>CBT</u>

Journal of Consulting and Clinical Psychology, 66, 862-866.

#### Supportive counseling

- Education about trauma reactions
- Education about general problem-solving skills
- Unconditionally supportive role
- Avoided exposure and anxiety management methods
- Homework: Diaries
  - Current mood states and problems

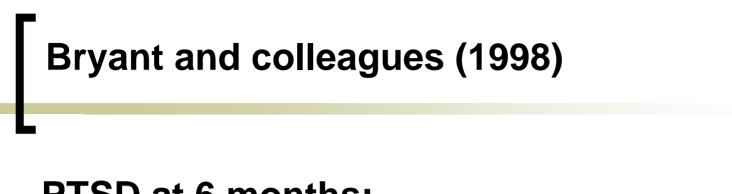
#### <u>CBT</u>

- Education about trauma reactions
- Progressive muscle relaxation training
- Imaginal exposure to trauma memories
- Cognitive restructuring
- Graded in vivo exposure to avoided situations
- Homework: Daily exposure



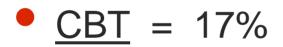
**PTSD** at post-treatment:

Supportive Counseling = 83%



#### PTSD at 6 months:

Supportive Counseling = 67%





- 45 patients with ASD
- MVA, nonsexual assault
- Randomly assigned to 5.5 hours of 1:1 treatment within two weeks of trauma:
  - Prolonged exposure
  - Prolonged exposure + anxiety management
  - Supportive counseling

#### American Journal of Psychiatry, 156, 1780-1786.

#### Prolonged exposure (PE)

- Imaginal exposure to traumatic memories
- 4 x 50 minutes (plus rationale session)
- Daily homework of same exercise
- Cognitive restructuring followed exposure in each session
  - Identify irrational, threat-related beliefs
  - Evaluate thoughts against available evidence
- In vivo exposure in last 2 sessions

#### Prolonged exposure + anxiety management (PE+AM)

- Education about trauma reactions
- Breathing retraining
- Progressive muscle relaxation
- Self-talk exercises
- Daily homework in above
- Exposure as above

#### Supportive counseling (SC)

- General problem-solving skills
- Unconditionally supportive therapist
- Diary keeping of current problems and mood states
- No exposure or anxiety management techniques

#### **PTSD** at post-treatment:

- <u>SC</u> = 56%
- <u>PE + AM</u> = 20%
- <u>PE</u> = 14%

#### **PTSD** at 6 months:

- <u>SC</u> = 67%
- <u>PE+AM</u> = 23%
- <u>PE</u> = 15%

#### **Conclusions:**

 ASD can be treated and PTSD can be prevented with brief CBT

 Anxiety management did not add to treatment gains of PE

Intrusions and arousal declined across all groups



#### **Conclusions:**

Dropouts had more severe symptoms

Cannot generalize to other trauma populations

 Can't separate out relative effects of exposure and cognitive restructuring

## Bryant and colleagues (2003)

Four-year follow-up of 1999 study participants

Conclusion: ASD can be treated and PTSD can be prevented with brief CBT.

Behaviour Research and Therapy, 41, 489-494.

#### "New" empirically-validated cognitive-mediational paradigms

Emerging and increasing application and modification of eastern philosophies and techniques in western clinical settings

# Examples of "New" empirically-validated cognitive-mediational paradigms

#### "Mindfulness and Acceptance"

Hayes, S.C., Follette, V.M., & Linehan, M.M. (Eds.) (2004). <u>Mindfulness and acceptance: Expanding the Cognitive-</u> <u>Behavioral Tradition</u>. New York: Guilford Press.

#### "Mindfulness-Based Cognitive Therapy"

Segal, Z., Williams, M,, Teasdale, J. (2002) <u>Mindfulness-</u> <u>based cognitive therapy for depression: A new approach to</u> <u>preventing relapse</u>. New York: Guilford Press.

#### "New" empirically-validated cognitive-mediational paradigms

#### "Mindfulness-Based Stress Reduction"

Kabat-Zinn, J. (1990). <u>Full Catastrophe Living: Using the</u> <u>Wisdom of Your Body and Mind to Face Stress, Pain, and</u> <u>Illness</u>, Delta.

#### "Choosing to Change"

Young, B.H. (1990). Facilitating cognitive-emotional congruence in anxiety disorders during self-determined cognitive change: An integrated model. Journal of <u>Cognitive Psychotherapy: An International Quarterly</u>, <u>4</u>, 229-240.

#### Cognitive-oriented treatments: "New" paradigms

Acceptance and Commitment Therapy (ACT) is based on the theory that much of what we call psychopathology is the result of the human tendency to avoid negatively evaluated private events including certain emotions, cognitions, memories, and bodily states.

The theory is based on a contextual-behavioral analysis of private events and predicts negative effects for direct efforts to control those phenomena.

> Hayes, S.C., Strosahl, K., & Wilson, K.G. (1999). <u>Acceptance and Commitment Therapy: An experiential</u> <u>approach to behavior change</u>. New York: Guilford Press.

#### Cognitive-oriented treatments: "New" paradigms

Mindfulness-Based Cognitive Therapy integrates the evidence-based techniques of Cognitive-Behavioral Therapy (CBT) with elements of Zen meditation practice, relaxation techniques, mindfulness-based stress reduction, and the conscious cultivation of awareness and acceptance.

## Intentional Behavioral Change: A Cognitive Behavioral Model

Bruce H. Young, LCSW

2005 Disaster Behavioral Health Conference

## Four defining characteristics of "Choosing to Change" CTC

- 1. Attending to critical role of concentration in intentional cognitive-mediational change
- 2. Attending to process of facilitating emotional-cognitive congruence
- 3. Non-pathological model
- 4. Non-linear model

# CTC: Outline of overview

### I. Presenting rationale to participants.

# II. Brief description of skills & their integration.

### III. Description of CTC Monitor



### IV. Description of "Self-Talk Worksheet."

# V. Environmental and procedural considerations.

### I. Presenting rationale to participants

 Explain that program is based on the creative integration of learnable skills individually demonstrated by scientific studies to help bring about positive behavioral change.



Refer to "techniques" as skills to be learned.

 Give rationale for the integration of the learned skills related to self-induced relaxation, focused attention, and conscious self-talk.



 Describe and give examples of self-defeating beliefs.

 Describe and give examples of self-defeating emotions.

• Explain the value of social support.



 Explain the importance of understanding the "process" of achieving positive behavioral change.

## Skills: Attentional muscle relaxation

Basically systematic progressive muscle relaxation procedure with...

added element of attentional focus to simultaneously teach self-induced relaxation and aid development of <u>concrete</u> concentration.



Attentional breathing (described later)

Used to develop <u>abstract concentration</u> while in a relaxed state.

Review guidelines for skill development:

- 1) Each repetition of inhalation and exhalation is done slowly and quietly (*"Another person should not be able to hear your breathing."*).
- 2) Each inhalation and exhalation is executed for as long as possible without discomfort while the primary focus of attention is on the sensation of breathing *in* and *out*.

3) There are four steps; each step is repeated three times. Members are instructed to keep track of step and repetition to help them develop focused attention. A useful method of tracking is to begin with the thumb placed on the lowest of the three sections of the index finger. For each repetition, the thumb is moved one section upward. For each successive step, the corresponding successive finger is used until the thumb has reached the top section of the "pinky."

- 4) Ask members to record level of relaxation/tension on the *CTC* monitor.
- 5) Ask members to sit comfortably and close eyes. Members who wish to keep eyes open are asked to focus attention on a spot in front of them.

6) Begin the guiding members through four steps:

- I. Inhale through nose hold two seconds Exhale through nose (Thumb on index finger)
- Inhale through nose hold two secondsExhale through mouth (Thumb on middle finger)

III. Inhale through mouth hold two secondsExhale through nose (Thumb on ring finger)

IV. Inhale through mouth hold two secondsExhale through mouth (Thumb on pinky)

7. Ask members to resume their natural form of breathing and to re-orient to the room. Inquire about members' experience and invite questions. Ask members to record level of relaxation/tension on the *CTC* Monitor. Ask if anyone's level of tension increased.

## Monitoring skill development

Monitor described and provided to track level of relaxation achieved through the two attentional relaxation procedures.

#### CTC MONITOR

Use the CTC Monitor to measure your progress with the Attentional Muscle Relaxation (AMR) and the Attentional Breathing Relaxation (ABR). Rate your level of tension / relaxation before and after each practice session using the following scale as a guide:								
10 = Absolutely tense					5 = Slightly relaxed			
9 = Extremely tense					4 = Moderately relaxed			
8 = Very tense					3 = Very relaxed			
	7 = Moderately tense				2 = Extremely relaxed			
		ghtly tense		1 = Absolutely relaxed				
<b>o</b> ,				after				
After the completing the relaxation procedure, record which skill you used and if you listened to the tape or did the								
relaxation procedure on your own. Lastly, record if you spoke to your assigned buddy.								
10	10		Example	10	10	10		
10	10		10	10	10	10		
9	9		9	9	9	9	0	
7 h	8	8	8	8	7	8 7	8	
7 b	7		7	7	7	7		
6	6		6	6	6	6		
5	5		5	5	5	5		
4 a	4		4	4	4	4		
3	3		3	3	3	3		
2	2		2	2	2	2		
1	1		1	1	1	1		
Deter	7.00							
Date:	<u>7-29</u>							
Skill:	<u>ARM</u>					-		
	TV							
Tape:	<u>  Y</u>							
Buddy contact: <u>BY</u>								
Lemend								
Legend								
Skill: AMR= Attentional Muscle Relaxation ABR = Attentional Breathing Relaxation								
Tape: TY=Yes TN= On my own								
Buddy contact: BY= Yes BN= No								

ce

# CTC: Experiencing relaxed states in less and less time

### Attentional muscle relaxation

Sessions 1-3 45 minutes (21 muscle groups)

Sessions 4-8 20 minutes

("Collapsing" muscle groups)

- Sessions 9-11 10 minutes
- Sessions 12-14 5 minutes

Sessions 15-18

1 minute

### CTC: Cognitive restructuring "Self-talk" worksheet

Handout in session 2

Worksheet with 10 - step process designed to help begin counter the effects of specific self-defeating beliefs.

Takes several weeks of work to complete.



1. Write down negative thought related to diabetes:

*"I will never be able to control this by changing my diet."* 



2. Are you willing to view this thought as negative belief that could potentially cause you further ill health?

"Yes, I can see that thinking that I can't control the diabetes by following the recommended diet, that I am not giving myself a realistic chance to help myself."

3. Are you willing to replace this thought with another thought to counter its potential negative effect?

"Yes, I can believe that I am not helpless and there are countless ways in which I can help with treatment."

4. What might you say to yourself to strengthen this counter-belief? List three thoughts....

"I am not helpless." I actually often help myself." 'Helping myself is very important."

5. Summarize these three sentences into one sentence:

*"Helping myself is important and means I am not helpless."* 

6. Select two to eight words from sentence that represent implied affirmation

"Helping myself important."

- 7. Divide this affirmation (phrase) into two or three parts
- 1. "Helping myself" 2. "Important"

- After having gained proficiency at either relaxation skill
   first go through relaxation protocol; then while in a state of relaxation begin repeating the sections of the phrase (Attentional Cognitive Skill).
- 1. "Helping myself"
- 2. "Important"

(Slow/long Inhalation) (Slow/long Exhalation)

9. Describe an actual situation that would be an opportunity to recall your affirmation:

"I am asked by the treatment team to monitor my diet. Instead of believing what's the use, I remind myself that I can help myself and that it is important to do so."

10. Describing and monitoring behavioral change

Case example -- Frequency

If for example baseline is disregarding diet 7 times a week; a reasonable goal for the first three weeks would be to break it 5 times a week; eventually you could reset the goal for two times a week....



Requires group room.

Room should be insulated from loud and distracting noises.

Ideal if the room can have the exact same setup for each session. Uniformity of environmental conditions helps to accelerate learned relaxation response.

# CTC: Procedural issues

Check-in process explained so that members can learn how to quickly and effectively use check-in routine.

## CTC: Check-in procedure

"We're going to begin each session with a brief Check-in so that you can tell us about your readiness to be in group today. Everybody brings something with them to group, and the Check-in is a time when you can let us know what's on your mind so you can get feedback or help if you need it and so that you can begin to put aside other concerns to concentrate on what's going on here. The process isn't intended to be therapy, but rather a means to help you focus on being here."

## Homework

Provide tape recording or CD of skill development procedures to aid home practice.