# *Cognitive-Behavioral Treatment of Children and Adolescents: Overview Of Theory and Techniques*

MICHAEL BUTKUS, PHD
Executive Director WSU Project CARE

Assistant Professor
Children's Hospital of Michigan
Department of Psychiatry and Psychology
**June 19, 2008**
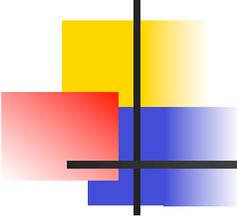
Evidence based practices & CBT

- Few of the hundreds of therapies for children and adolescents meet the tests of evidence, e.g., APA's efficacy criteria:
  - Well supported and possibly efficacious to unsupported and possibly harmful
- CBT has met the criteria for well supported and possibly efficacious for a number of disorders, perhaps more so than any other type of therapy
- However, not all therapies have been empirically investigated yet.
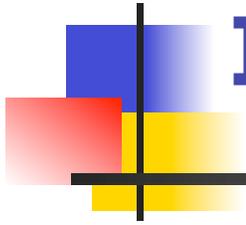
I. Theory
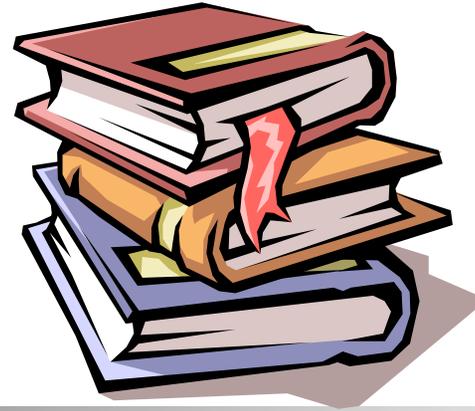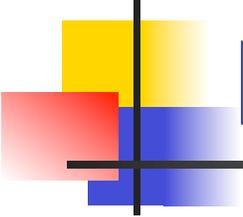
Foundations of CBT

- Development of CBT influenced by the works of early behaviorists: Pavlov, Skinner; later by Bandura and Wolpe and cognitive therapists: Aaron Beck and Albert Ellis
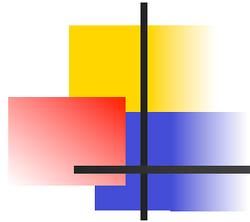
CBT Definition

Enactive, performance-based procedures as well as cognitive interventions to produce changes in thinking, feeling, and behavior (Kendall, 2000).
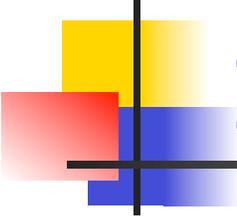
Interrelationship

- **Behavior, thoughts, and feelings are seen as causally related in CBT and are all treatment targets.**

Behavior

Thoughts ⟷ **Feelings**
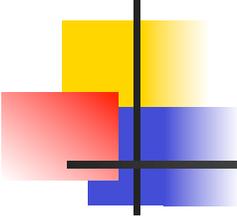
Role of Learning

- **Learning is pivotal in the acquisition and maintenance of behavior— adaptive or dysfunctional**
- **Just as adaptive behavior is learned, so is maladaptive behavior**
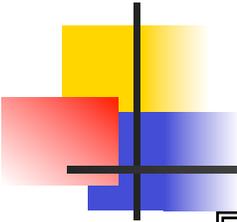
Learning Methods

Operant conditioning

S (stimulus)   **R** (response) **+CQ** (consequence)

= learning

(Consequence: reward or punishment)

Classical Conditioning

CS (bell) ═══════════ **CR (salivation)**

║   ║

**US (food)** ─────────→ **UR (salivation)**
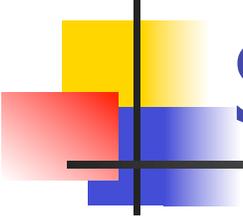
Social Learning and CBT

- **The principles of social learning theory (based on the work of A. Bandura):**
  - **Observational learning**
  - **Imitation**
  - **Modeling**
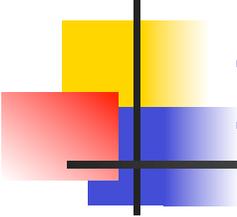
Influence and Context

- **A child's behavior is influenced by its environment and the environment is influenced by the child's behavior.**

- **Behavior is the product of an ever changing interaction between person and environment (reciprocal determinism) (Bandura, 1977).**
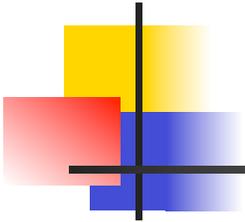
CBT Domains Of Importance

Interpersonal/Environmental Context

Physiology

Behavior

Cognition

Emotions
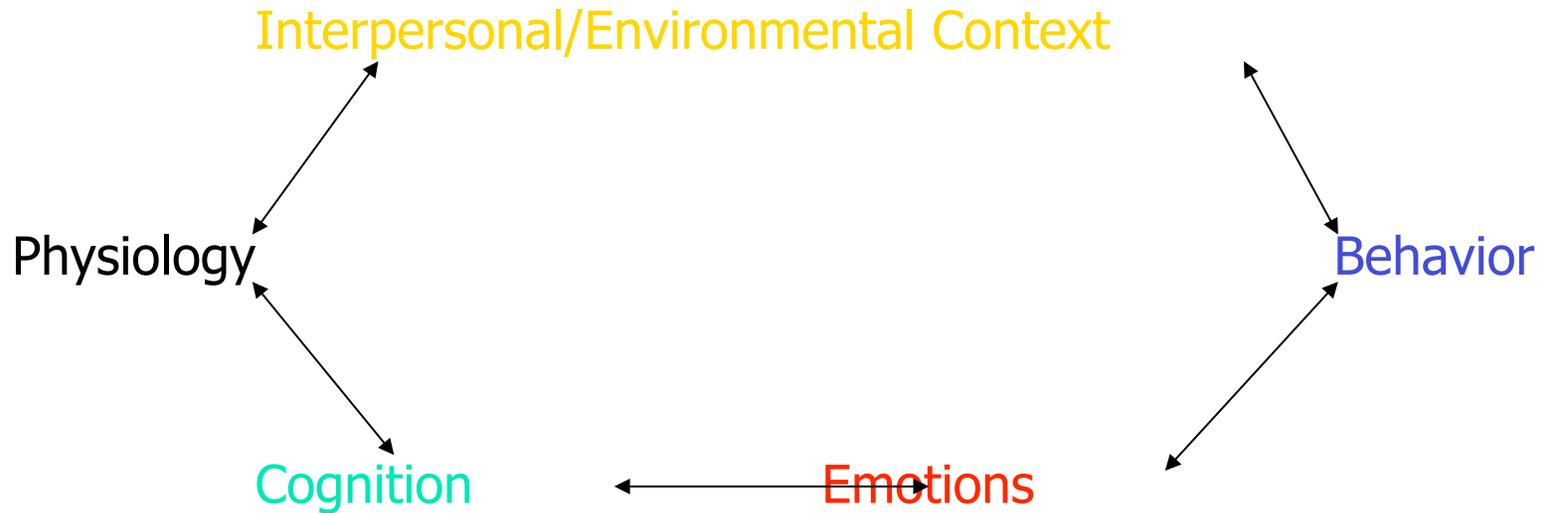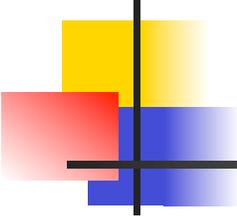
Nature of CBT

- **In CBT learning is more than rewards and punishments.**

- **Learning also depends on the manner in which children and adolescents process information cognitively.**
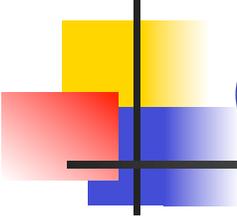
Cognitive Processing

- **Children (and adults) evaluate, judge, and categorize behavior.**
- **They actively construct information by selecting, encoding, and explaining what happens to them and others (Friedberg & McClure, 2002).**
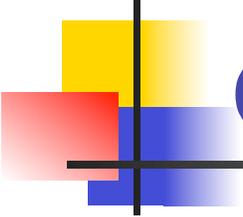
Cognitive Processing

- **How children interpret what happens to them is critical to their emotional functioning.**

- **Everyone, including children and adolescents, actively processes experience and information.**

- **Behavior is not just generated as is assumed in more classical learning theory.**
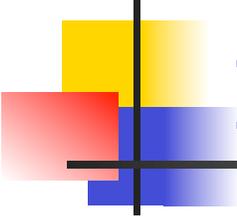
Information Processing

Kinds of thinking:

- **Conscious thoughts**

- **Automatic thoughts: assumptions, expectations, attributions**

- **Deep seated attitudes and beliefs**
  - **products of:**
    - **Core beliefs or Schemas**
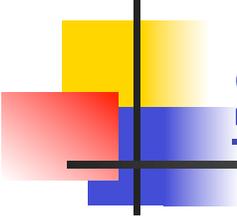
Schemas:

- **Core meaning structures that direct attention, encoding, and recall (Fiske & Taylor, 1991).**

- **Can be thought of as templates that actively filter information.**

- **Are actively constructed from a very early age and reinforced over time.**

- **Are protected from an early age.**

- **Information discrepant from the core beliefs is often nullified or transformed via <u>cognitive distortions</u>.**
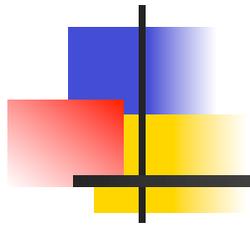
II. Treatment
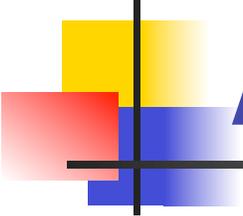
Aim of Treatment

Alter core beliefs to ensure sustained change in emotions and behaviors
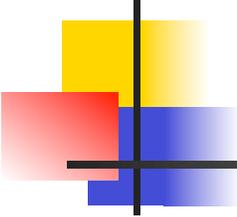
Nature of CBT

- **CBT attempts to understand the relationship between a child's behavior and accompanying cognitive processes (automatic thoughts, distortions, schemas).**
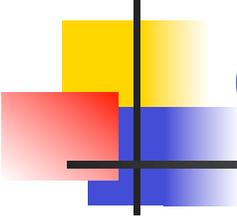
CBT Treatment

- **Goal: help child manage their psychopathology and move closer to the normal developmental trajectory**

- **How: Help child learn more adaptive problem-solving skills;**

- **By providing meaningful and real experiences that alter cognitive processes and content and ultimately cognitive structures that can be then used with future experiences (Kendall, 2006)**
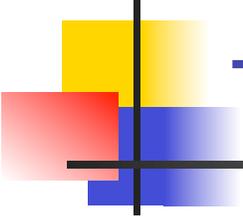
The Role of the Past in CBT

- **In CBT the past is de-emphasized.**
- **The past is viewed as offering clues re: behavior patterns, reinforcements, cognitive processes, and how the core beliefs began.**
- **But CBT is very "here and now" focused.**
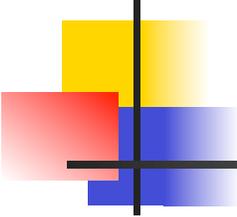
Relationship Importance

- **In CBT (and just about all other therapies) the nature of the therapeutic relationship is important.**
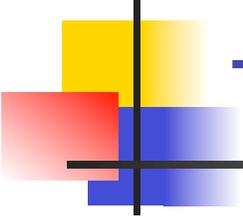
Thoughts and Feelings

- **Beck and others have shown that distinct cognitions are reliably associated with distinct emotional states (*content-specificity hypothesis*).**
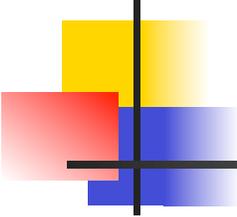
Depression Schema

- **Classic negative triad: depressed individuals have negative view of the self, others, and the future—"I'm not worth anything." "No one will like me." "It will be this way forever."**
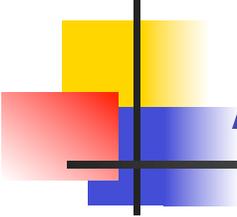
Anxiety Schema

- **Anxious individuals have different cognitions that are based on the cognitive distortion of catastrophizing—"the world is always dangerous." "I must always look for danger." "I'm not able to handle danger."**
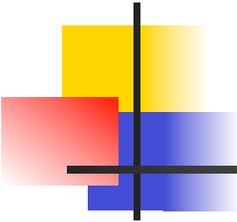
Causes of Emotional And Behavioral Problems In Children

- **Cognitive distortions (i.e., Dysfunctional or biased information processing)**
- **Cognitive deficiencies (i.e., Absence of thinking)**
- **Disturbed beliefs**
  - **2+2=5**
- **Lack of appropriate behavioral skills**
- **Inadequate problem-solving skills**
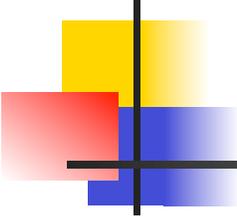
Nature of CBT

- **Exposure to many behavioral experiences or events**
- **These are concurrently processed cognitively**
- **Over time new schemata are developed**
- **New thoughts, behavior and feelings emerge**
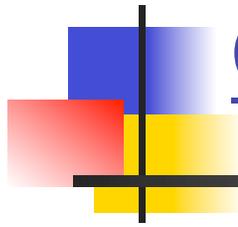
General CBT Format
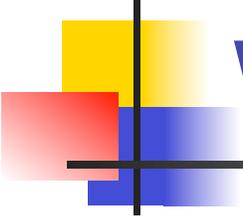
What to Assess?

- **A, B, Cs**
  - **<u>A</u>ntecedents or Activating Events: cause of strong feelings and/or negative cognitions or thoughts**
  - **<u>B</u>eliefs: caused by <u>A</u>**
  - **<u>C</u>onsequences: negative emotions or behaviors**
- **Temporal course of symptoms**
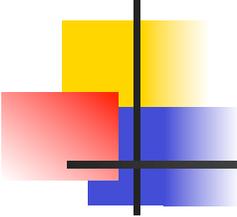
# How to Assess?

- **Interview (Multisource/Multimethod)**
  - **Child, parent, teacher, significant others**
- **Observations**
- **Testing**
  - **Rating scales**
  - **Intelligence**
  - **Personality testing**
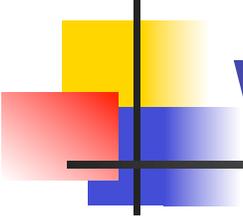
What to Target?

- **Identification of:**
    - **Underlying beliefs**
    - **Assumptions**
    - **Expectations**
    - **Goals**
    - **Attributions**
    - **Automatic thoughts**
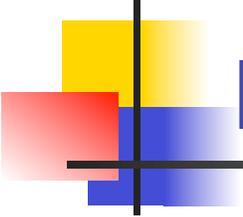
More Targets

- **Medical factors**
- **Environmental factors:**
  - **Stressful life events**
  - **Modeling**
  - **Reinforcement history**
- **Behavioral and interpersonal skill deficits**
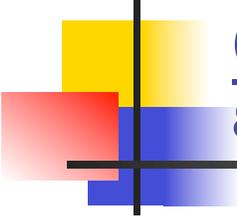
Case Conceptualization: ("You need a recipe for all the ingredients")

- **Precedes goal determination, agenda setting, and use of techniques**
- **Requires hypothesis generation and testing**
- **Specifies the five elements noted above (behavioral, emotional, interpersonal, physiological and cognitive components)**
- **Functional Analysis of Behavior**
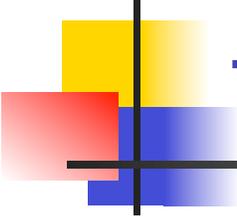
Treatment Processes in CBT

- **<u>Collaborative empiricism</u>**

- **<u>Guided discovery</u>**
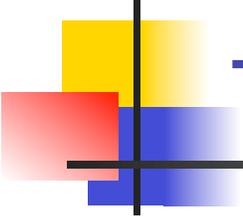
Tasks of a CBT Therapist

- **Because emotional events tend to have more impact, CBT attempts to engage the child emotionally**

- **Treatment sessions should be fun**

- **Treatment sessions should be real**

- **Transfer of skills from therapist to child**
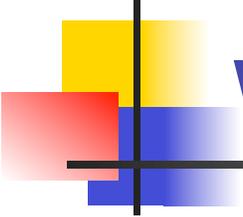
What Is Done in CBT?

- **Child and parents are taught cognitive and behavioral interventions and the rationale for them**
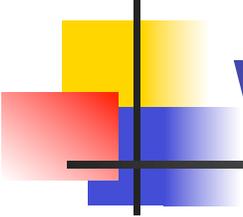
What Is Done in CBT?

- **In-session practice**
- **Continual assessment of motivation and expectations**
- **Homework**
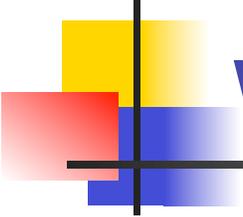
What Is Done in CBT?

- **Identification of factors interfering with completion of homework or other techniques**

- **Evaluation of effectiveness (outcome assessment)**

- **Modification of intervention strategies as needed**
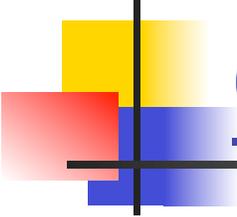
Quiz

Which of the following is characteristic of a CBT therapist?

1. **Diagnostician**
2. **Consultant**
3. **Educator**
4. **Team member**
5. **All of the above**
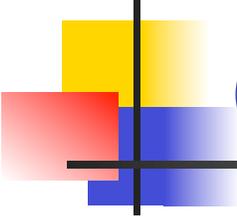
Quiz

Which of the following is *not* a characteristic of a CBT therapist?

1. **Active**
2. **Problem-oriented**
3. **Structured**
4. **Flexible**
5. **Creative**
6. **None of the above**

Structure Of A Typical CBT Session
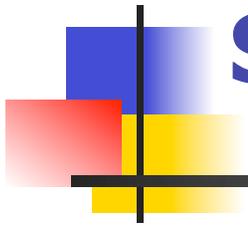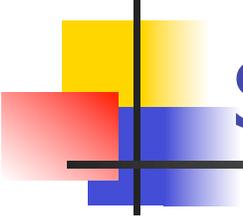
Session Structure

- **Assess:**
  - **Current mood**
  - **Symptom level**
  - **Symptom frequency and intensity**
- **Review recent issues and incidents**
- **Review homework**
- **Set agenda**
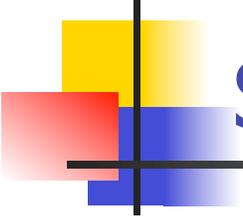
Session Structure

- **Implement techniques and strategies to accomplish goals from agenda**
- **Evaluate/assess understanding of techniques taught and motivation to implement them**
- **Assign homework task(s)**
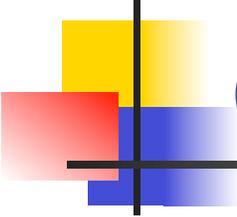
CBT Methods

- **Self-monitoring/recording**
- **Role play**
- **In session practice of new behaviors**
- **Modeling**
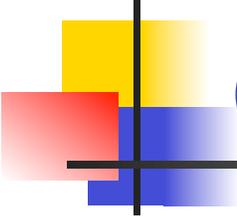
CBT Methods

- **Self-evaluation**
- **Reinforcement by therapist and self**
- **Homework**
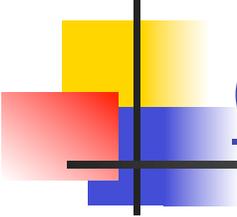
Cognitive Restructuring Methods

- **What's the evidence? (Being a thought detective)**
- **Identify thinking errors**
  - **Over-generalization**
  - **Personalization**
  - **Magic thinking**
  - **Mind-reading**
  - **Magnification**
  - **Discounting the positive**
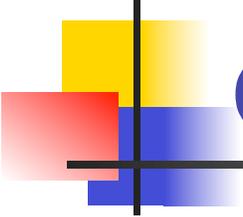
Cognitive Restructuring

- **Challenge dysfunctional beliefs:**
    - **What if....?**
    - **What would you tell a friend?**
    - **Playing attorney and judge**
- **Generating healthier alternatives**
    - **Belief Strength**
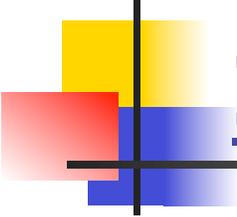
Irrational Beliefs Of Adolescents

- **It's my parent's fault I'm so miserable.**
- **The world should be fair and just.**
- **I must conform to my friends.**
- **I can't stand to be criticized.**
- **I'll always be the way I am.**
- **I can't help it.**
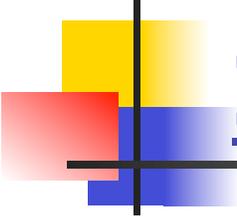
Irrational Beliefs Of Children

- **Others must always like me.**
- **I'm bad if I make a mistake.**
- **I should always get what I want.**
- **Things should come easy to me.**
- **Adults should be perfect.**
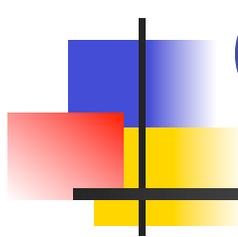
CBT and Clinical Conditions
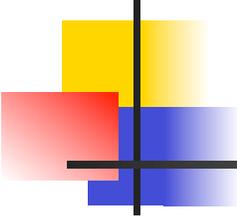
Depression

- Goal Setting
- Affective Education
- Mood Monitoring
- Cognitive Restructuring
- Problem-Solving
- Activity Scheduling (Behavioral Activation)
- Self-esteem building
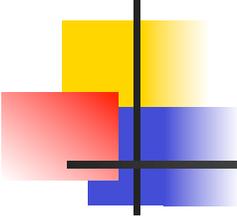
Bipolar Disorder

- Use all methods mentioned so far but include recognition warning signs and cycles
- Plan for handling behavioral excesses
- Plan for how family, child and others will respond to the illness when it erupts
- Expect long course of treatment with many positive changes and regressions
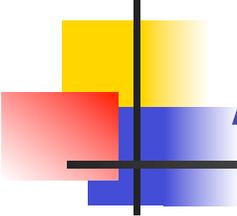
Anxiety

- Exposure and Response Prevention
- Systematic Desensitization
- Relaxation
- Breathing
- Probability Estimation
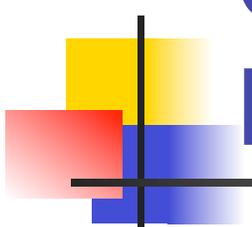
CBT Resources for Anxiety Problems

- Good program: Kendall's *Coping Cat*

- Good resource: Chorpita's <u>Modular CBT for Child Anxiety Disorders</u>, 2007

- For OCD: March and Mulle, <u>OCD in Children and Adolescents</u> and March and Benton, <u>Talking Back to OCD</u>, 2007
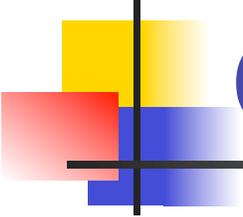
Conduct Problems

Effective strategies:

- **Attribution Re-training**
- **Anger management**
- **Structured Problem-Solving**
- **Cognitive Restructuring**
- **Response Cost/Contingency Management**
- **Behavioral Parent Training**
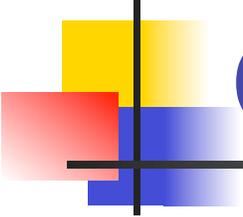
Conduct Problems

Effective Programs:

- **MST; effective for African-American youth**

- **Brief Strategic Family Therapy** (see Szapocznik, et.al., 2003)

- **Problem-Solving Skills Training** (see Kazdin, 2003)
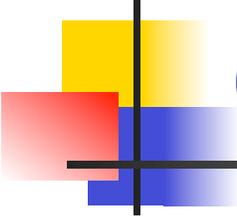
Oppositional Behavior

- **Effective Strategies:** *contingency management; DROB* (differential response for other behavior)

- **Effective Programs:** *Parent Management Training (PMT)* for pre-teens; *Problem-Solving Communication Skills Training* (see Robin) for adolescents
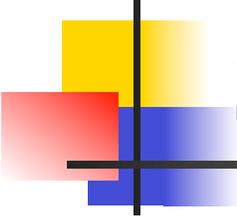
Substance Use

- **Difficult to recommend one particular tx because of the diversity of substance abusing youth; broad-based, multi-component tx programs seem to work well, e.g., Multidimensional Family Therapy, MST**

- **Essential to include CBT with Motivational Enhancement and Staging**
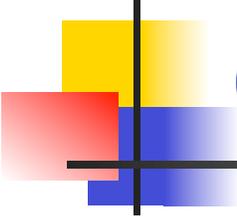
CBT & Ethnic Minorities

- Research still sparse but building
- Key points:
  - **CBT works (insight-oriented txs don't work as well)**
  - **Better response if tx is highly structured, time-limited, pragmatic and goal-oriented;**
  - **Using culturally-responsive strategies doesn't always lead to better results; ambiguity in research results**
  - **Adding too many intuitively appealing culturally responsive strategies, may alter characteristics of CBT to point it is no longer model adherent**
  - **Recommendation: Implement CBT as designed and add more culturally-sensitive strategies as suitable**
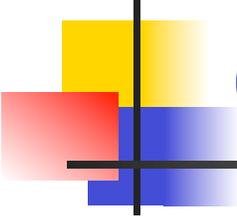
CBT Works Best If:

- **Fidelity and outcome measurement are used**
- **Clinical judgment is used (not just blind adherence to a manual)**
- **Cultural factors are considered**
- **Limitations of the techniques are appreciated**
- **New therapists are supervised**
- **A working alliance based on trust is developed early**