



mindspace
Psychology Services

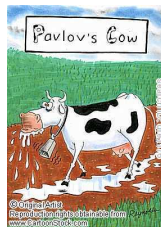
Mindfulness and CBT: Can children ride the 3rd wave?
Pickering Center
Carleton University
November 25th, 2011



CBT in 3 Waves

1) 1950-1970: Behaviourism

- Rebellion against Freud and Rogers:
 - Systematic effort to develop and validate methods
 - Centrality of experimental science
 - a) linked to experimental science
 - b) applied laboratory-based principles.
 - Watson S-R associations
 - Skinner operant conditioning
 - Wolpe systematic desensitization
 - Reinforcement learning



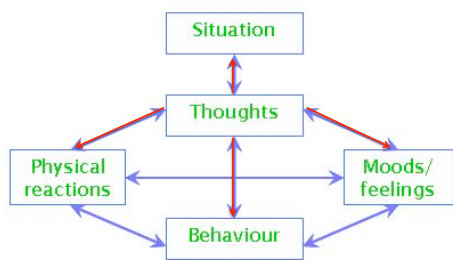
CBT in 3 Waves

2) 1970-1990: Cognitive Revolution/Therapy

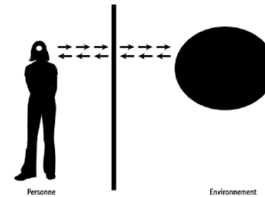
- Clinicians getting frustrated
- No adequate account of language
- Information processing/computer metaphor
- Let's ask patients what they think:
 - Bandura - Social Learning Theory
 - Aaron (Tim) Beck - Underlying beliefs, schemas
 - Albert Ellis (RET/REBT) - Irrational cognitions
- Clinically-based theories of cognition
 - Causal role of internal dialogue
 - "Search and destroy" cognitive errors
 - Behave in healthier way
 - less body-up, lab principles - abandoned



CBT Theory



2nd Wave World



- Environment shapes thoughts, beliefs, and schemas
- These constructs act on perception and interpretation of world
- CT raises awareness about these constructs and restructures them

CBT is born

- Big enthusiasm in clinical community
- Revolution in experimental psychology
- Politics!
- Result: accommodation into BT (80s)

Principles of CBT

- Collaborative
- Educational
- Skills and strategies
- Present functioning
- Symptom focused
- Structured and goal-directed
- Time Limited

CBTKids

- ≥ 6 years old: cognitive maturity
- Intrinsically motivated child with involved parents
- Children who practice



A Dozen Dirty Tricks Your Mind Plays on You



ONE-EYED OGRE: Seeing things from only one side and ignoring all other sides.

PRISONER OF FEELING: Using your feelings as the main guide for your actions and thoughts.

DISASTER FORECASTER: Falsely believing something awful will happen with very little to back up your ideas.

MAX-IME THINKING: Falsely believing all the bad things that happen to you or other people are all your fault.

LAME BLAMING: Using a label for yourself ("I'm bad") or others ("They're a witch, it's all their fault").



FORM 3.1, Inner 2 of 3

MULE'S RULES: Stubbornly insisting that your ideas about how you, other people, and the world should act are the only ones that are right.

COUNTLESS THINKING: Convincing yourself that strengths, successes, and good experiences do not count.

TRAGIC MAGIC THINKING: Incorrectly believing you know exactly what is going through someone else's mind without checking it out or asking him or her.

TALL-TALE THINKING: Believing something despite there being little to back up the ideas.

NO MIDDLE RIDDLE: Seeing things in only two ways, like you are perfect or you are a total loser.

CIRCUS MIRROR THINKING: When you look at yourself, other people, or what happens to you, you shrink the positive (+) or enlarge the negative (-).

TOO FAST FORWARD: Jumping to big conclusions by using small bits of information. Not waiting to get all the results or information you need.



FORM 3.4

Clean Up Your Thinking Diary

Date	Situation	Feeling	Thought	Dirty trick	Clean-up strategy	Fresh thought

Evidence

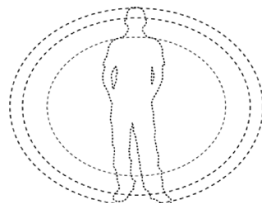
- Munoz-Solomando, Kendall, and Whittington (2008). *Current Opinion in Psychiatry*:
- 1) Best evidence for CBT (Anxiety disorders)
 - Very positive effects
 - Robust evidence
 - Less so for OCD and PTSD
- 2) Moderately good evidence for effectiveness of CBT for depression (Watanabe et al. 2007 - Meta-analysis 27 studies)
 - Mixed controls: waiting lists, nondirective supportive therapy, clinical management, or other active treatment.
- 3) Moderately good evidence for CBT for Externalizing Disorders
 - Involving parents is beneficial, especially for preschool-aged children.
- 4) Some evidence for CBT for ADHD
 - Best evidence is for preschool children.

3rd Wave

- Pick & Choose
 - Functional & Contextual
 - Bottom-up & Behavioural
 - Laboratory-based, well-defined, and scientifically tested
- Key principle: Your relationship to your experiences determines how emotion and behaviour congeal.
- *Rather than targeting and attempting to change the content, frequency, and form of thoughts and feelings directly, acceptance-based therapies seek to alter the function of internal phenomena so as to diminish their behavioural impact.*

Jacobson (1997)

- Emphasis on context
- Pathology isn't in the mind; but rather emerges from an interaction with the individual and the environment
- No single cause



3rd Wave Approaches

- MBSR – Kabat-Zinn (1990)
- DBT – Linehan (1993)
- ACT – Hayes (1999)
- MBCT – Segal (2002)
- MB-EAT (2006)
- MB-everything

Key Elements of 3rd Wave Approaches

- Functionalism, Pragmatism
- Didactic vs. Experiential
- Acceptance vs. Control

Key Principles

- Modification of content vs. distancing
- Restructuring vs. Mindfulness
- Therapeutic relationship

What is Mindfulness?

- A state of mind characterized by attention to present experience and an open, non-judgmental attitude
- Originates in Buddhist philosophy and spirituality
- Explosion of interest in the west in the last 30 years
- Translated and integrated into mainstream psychological and medical treatments
 - E.g. 10 million Americans meditate regularly

What is Mindfulness?

- Mindfulness meditation:
 - Bring attention to whatever is being experienced in the moment (e.g. the sensation of the flow of the breath)
 - Without reacting to or judging that experience
 - A way of learning to relate *directly* to whatever is happening in life
 - This kind of awareness tends to minimize maladaptive habitual reactions
- Brief practice

Benefits of Mindfulness

- Clinical Research:
 - Relaxation
 - Concentration
 - Emotion regulation
 - Clearer vision of "big picture"
 - Enriched spirituality and compassion for self and others
- Physical Health:
 - Decrease blood pressure and heart rate
 - Slows or controls chronic diseases
 - Improves immune functioning
- Basic science:
 - the flexibility of attention
 - the quality of intimate relationships
 - the experience of positive affect
 - empathy and compassion for others
 - spirituality



Neuroplasticity

- Davidson et al. (2005)
 - Brain imaging (EEG): Tibetan monks vs. novice meditators
 - Compassion meditation
 - Highest frequency of gamma, ever recorded
 - Left-frontal asymmetry



Health Promotion

- Davidson et al. (2003):
 - 48 employees of a biotechnology firm
 - MBSR vs. No-treatment control
 - fMRI and immune functioning
 - MBSR group showed
 - a) ↓ in negative affect (self-report)
 - b) ↑ activation in the left vs right frontal lobe
 - c) ↑ antibody response
- Baer (2003) Meta-analysis:
 - Large mean post-treatment effect size (Cohen's $d = 0.74$, $SD = 0.39$)
 - medium effect size at follow-up (Cohen's $d = 0.59$, $SD = 0.41$).



2. Mindfulness-Based Stress Reduction

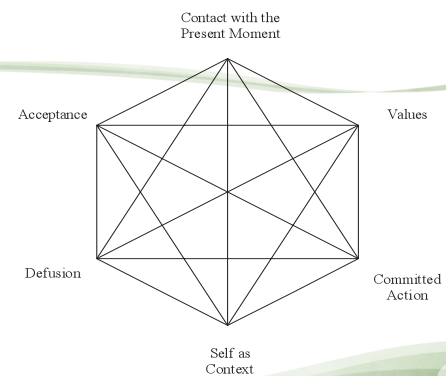
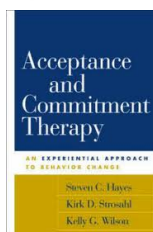
- John Kabat-Zinn
- 8 week, group-based introduction to Mindfulness practice
- Training in Mindfulness meditation, attentional flexibility, acceptance, and application in every day life.
- Guided instruction, group dialogue, and home practice
- Promotion of health and well-being, prevention of disease and injury
- Emphasizes self-responsibility

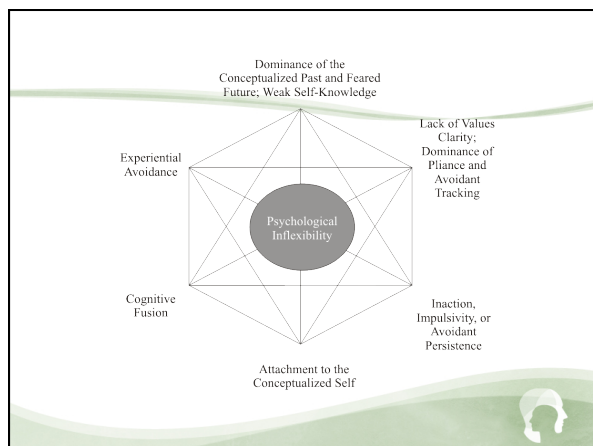
MBSR

- Over 4000 physicians have referred patients to the 8 week program
- More than 16,000 patients have completed the program in the last 25 years
- There are over 200 MBSR programs in medical centers, hospitals and free-standing clinics
- Medical problems addressed: cancer, heart disease, back pain, AIDS, chronic pain

Acceptance and Commitment Therapy

- CBT approach:
 - Metaphors, paradox, and experiential exercises
 - Contact the present moment
 - Behave in a way that consistent with values
- Target: Experiential avoidance
- Skill-based training in psychological flexibility





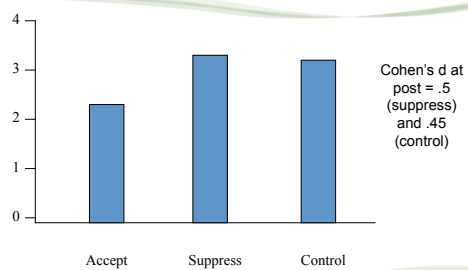
Acceptance and Exposure

Levitt, Brown, Orsillo, & Barlow, Behavior Therapy, 2004

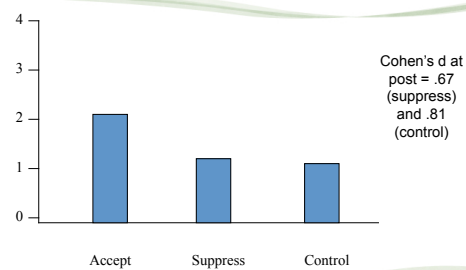
60 individuals with a primary diagnosis of panic disorder with or without agoraphobia randomly assigned to one of three groups (10 min audiotape): Acceptance, Suppression, Control group (irrelevant distraction)

15-minute 5.5% CO₂ challenge (panic provocation)

Anxiety During the Challenge



Willingness to do it Again



Evidence for ACT

• “Evidence-supported treatment” (APA)

Area	State of the Evidence
Depression	4 RCTs; 3 other. Some indication that it is superior to CBT in some settings. Evidence of a distinct process. 7 RCTs; 11 other. Data supporting the application of ACT with a number of different problems related to anxiety and stress. Some indication that it is superior to CBT in some settings, but also data that it can be beaten by traditional BT in minor anxiety problems. Evidence of changes in ACT processes.
Anxiety / Stress / OCD	3 RCTs; 5 other. Not yet compared to other psychosocial methods beyond support but effects are good for amazingly small interventions. Done in addition to antipsychotic medication. Mediated by ACT processes.
Psychosis	3 RCTs; 3 other. Some indication that it does better than existing pharmacotherapy methods, or supplements their effects.
Substance abuse	3 RCTs; 2 other. Indication that it does better than existing pharmacotherapy methods, or supplements their effects.
Smoking	3 RCTs; 7 other, including three decent sized effectiveness trials. Good outcomes. No good head to head comparisons with empirically supported alternative methods yet. Works through ACT relevant processes.
Chronic Pain	2 RCTs; 1 crossover. Beats multicultural counseling and education alone. Works through ACT relevant processes. Helps in both stigma and burnout. Other good studies completed and on the way.
Prejudice and burn out	1 other. Very limited data.
Marital problems	1 RCT; 1 other. Limited data.
Eating disorder	2 other. Very limited data.
Sexual deviation	1 RCT (sub-analysis); 1 other. Promising but limited data.
Dually diagnosed	1 RCT that mixed ACT with DBT. Extremely good outcomes but no follow up. Did move ACT relevant processes.
Self Harm / BPD	2 RCTs. Very good outcomes on both seizures and quality of life. 1 year follow up. Mediated by ACT processes.
Epilepsy	1 RCT. Good outcomes at follow up on self management and glucose control. Mediated by ACT processes.
Diabetes management	2 RCTs. Good outcomes which were mediated through ACT processes.
Weight maintenance	2 RCTs. Found ACT can increase the adoption of evidence-based psychotherapy methods by clinicians and is mediated through ACT processes.
Augmenting training in other therapies	2 RCT; 1 Other. Preliminary data suggests ACT can improve coping with cancer. One other completed RCT shows ACT is more helpful than traditional CBT in dealing with end stage cancer and works through a different process.
Coping with cancer	3 Other. Very limited data suggesting ACT can improve performance in various sports.
Sports performance	

Can Children Ride the 3rd Wave?

- Benefits for kids!
 - Increase self-awareness, impulse control
 - Decreased emotional reactivity
 - Short-term training, long-term effects
- Translation, child experience
- Teacher practice, parent involvement
- Component or stand alone?

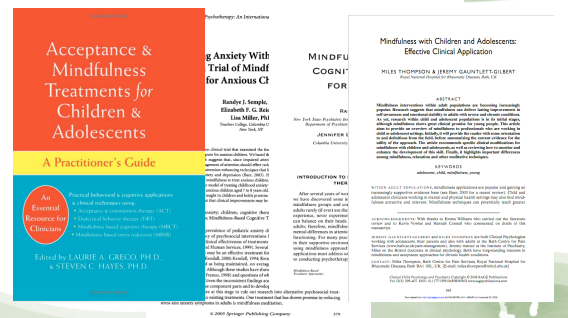


Mindfulness for kids

- Commonly used practices:
 - Mindfulness of breath
 - Body Scan
 - Walking meditation
- Bubbles, parades, puppies



Wave of publications



Emerging Programs

- Schoeberlein & Koffler (2005)
 - Increased self-awareness, and self-reflection, emotional intelligence, and social skills
- Social-Emotional Learning in school curricula
 - E.g. [Mindfulness in Schools](#)



MBSR-C

- Amy Saltzman – MBSR for children (2008)
 - Still and Quiet Place
 - Participants: children only or to children and one or both parents.
 - Class size: Eight to thirty participants
 - Eight sessions (two the first week and one every week thereafter).
 - Session length: The time varies from forty to ninety minutes per class, depending on the setting and class size.
 - Mindfulness practice: The training consists of both formal practice (including body scan, sitting, eating, and walking exercises) and informal practice (focusing attention, attending to the present moment, choosing responses to everyday events).
 - Practice at home
 - Preliminary Research
 - Feasible
 - Improvements in: attention, mood, metacognitive awareness,



ACT for kids

- Empirical support for ACT interventions for:
 - Adolescents at risk of dropping out school
 - Pediatric pain patients
 - Adolescent girls high-risk sexual behaviour
 - Eating disorders
- Protocols
 - Highly structured
 - Group-based
 - Focus on internal events
 - Tendency for mind to trick us
 - Values orientation



State of the Evidence

- Burke (2009): Mindfulness-Based Approaches with Children and Adolescents: A Preliminary Review of Current Research in an Emergent Field:

"Overall, the current research base provides support for the feasibility of mindfulness based interventions with children and adolescents, however there is no generalized empirical evidence of the efficacy of these interventions. For the field to advance, I suggest that research needs to shift away from feasibility studies towards large, well-designed studies with robust methodologies, and adopt standardized formats for interventions, allowing for replication and comparison studies, to develop a firm research evidence base."



- Thanks 😊