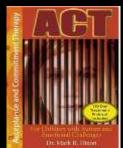


The Acronyms • RFT: Relational Frame Theory - Post-Skinnerian approach to language and cognition - Originated in late 80s and early 90s - First full textbook in 2001 • Acceptance and Commitment Therapy - Talk-therapy approach to psychological distress which follows directly from the RFT basic research - Use of "mid-level" terms to gain buy in from clients and non-behavioral community

The Autism Applications

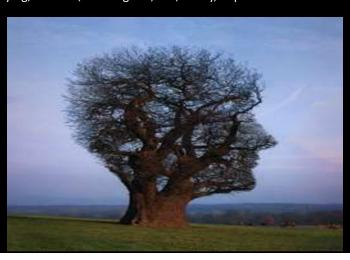
- RFT: PEAK Relational Training System
 - Comprehensive assessment and curriculum for running discrete trial training for children between 9 months and 18 years of age.
 - Incorporates traditional Skinnerian techniques with more complex cognitive and language processes
 - More empirical evidence than ANY OTHER ABA program
- Acceptance and Commitment Therapy
 - Full 180 days of therapeutic techniques designed to be delivered by parents, caregivers and behavior analysts
 - Implementation 1:1 or within a group setting.
 - Basic introduction to how ACT relates to children with autism is also provided.

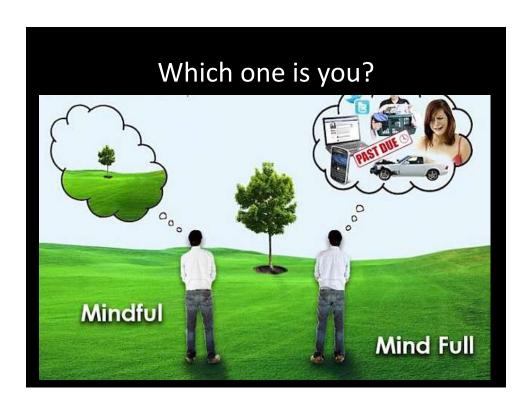


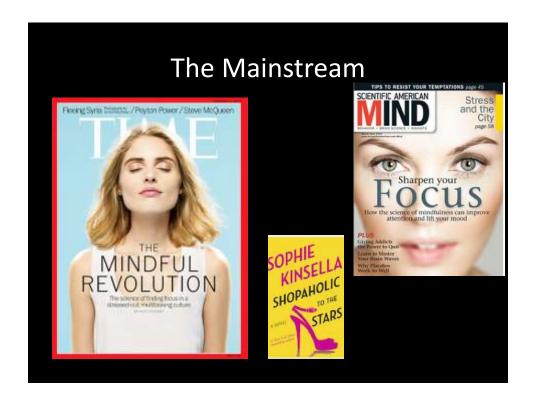


HOW MUCH TIME DO YOU SPEND IN YOUR HEAD?

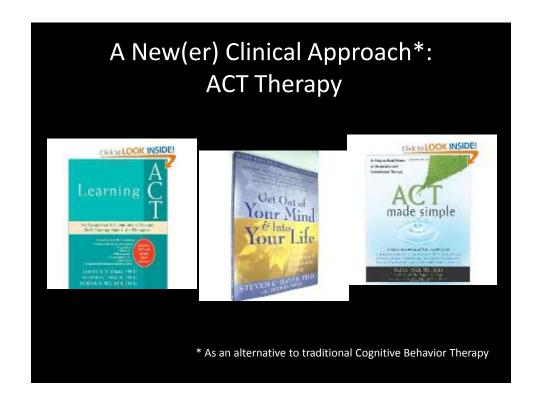
Worrying, stressed, freaking out, sad, lonely, depressed?











Your Top 5

- Best things about being a parent?
- Worst things about being a parent?

C-B-T

- Step 1: Identify distortions in thinking
 - Log of thoughts, and the triggers that caused them
- Step 2: Identify a replacement thought
 - Analyze the distorted thought, and take control over it with a new thought
- Step 3: Working through the necessary change
 - Breaking down large problems into smaller steps
- Step 4: Positive reinforcement for making even small gains
 - Rewarding along the way allows feeling accomplishments

A-C-T

- Step 1: Acceptance
 - Don't run and hide from the problem
- Step 2: Defusion
 - You are not your thoughts
- Step 3: Contact with the "Present Moment"
 - Awareness of yourself right here right now
- Step 4: Values
 - Are you living the type of life that you truly value
- Step 5: Committed Action
 - How serious are you about changing your behavior?

What is ACT?

- Experiential behavioral psychotherapy based on relational frame approach to human language
 - Emphasizes role of experiential avoidance, cognitive fusion, values absence/diminishment, and resulting behavioral rigidity and ineffectiveness
- ACT is a comprehensive model of therapy
 - NOT set of techniques
 - However, it includes many many many techniques, some used in other forms of therapy, that work together to increase psychological flexibility

What is ACT?

- ACT tries to:
 - Reduce domination of literal, evaluative, temporal language
 - Connect instead with our VALUES
 - Behave more FLEXIBLY + effectively focused on values, NOT fear!

"The single most remarkable fact about human existence is how hard it is for humans to be happy."

(Hayes, Strosahl, & Wilson, 1999)

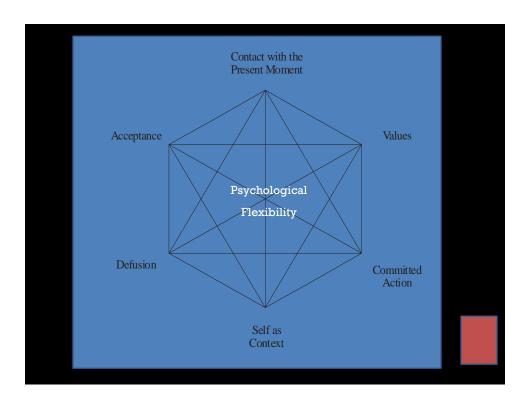
ACT Model

- An alternative to the traditional CBT treatment model
- Focus on *feeling* good instead of feeling good
- Doesn't try to change our thoughts or feelings, instead it changes the way we relate to them

ACT vs. CBT

- ACT
 - Behavior Change
 - Environment determines behavior
 - Changes Context
 - Acceptance of Private
 Events
 - Primary Goal = valued living

- CBT
 - Behavior Change
 - Environment + thoughts are casual
 - Changes Content
 - Control and restructuring
 - Primary Goal = symptom reduction



Present Moment

- · Contact with the present moment
- · Focus on what is happening right now
- Out of your mind and into your life
- Alternative to living in a imagined future or a reimagined past

Acceptance

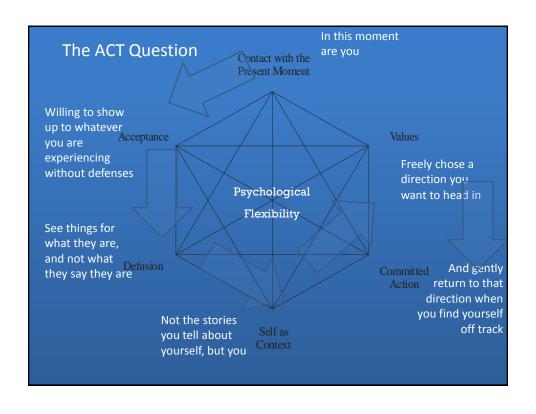
- Willingness to experience thoughts and urges, including unwanted and uncomfortable ones
- Acceptance is NOT an act of surrender or resignation that you will "always be a pathological gambler"
- Rather, it is giving yourself permission to feel what you are feeling – even if it is "I will always be a pathological gambler"
- Alternative to attempting to control/eliminate unwanted thoughts and urges to gamble

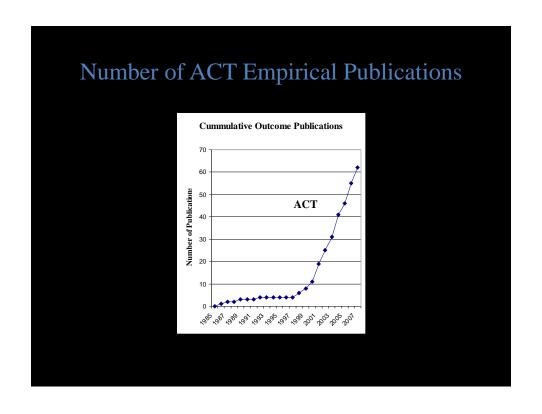
Defusion

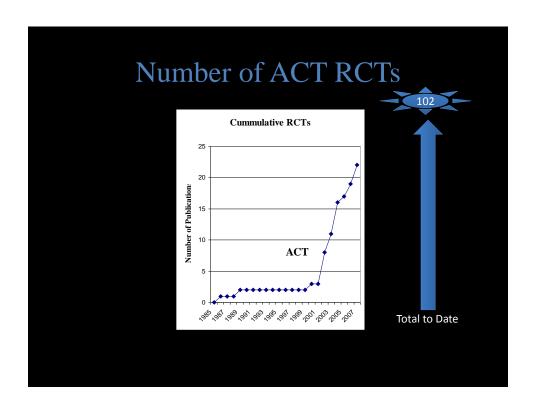
- Fostering flexible responses to rigidly held verbal relationships
- De-literalizing language
- Seeing things as what they are and not what they say they are
- Alternative to tightly holding inflexible and unworkable beliefs, stories, associations.

Self as Context

- Transcendental sense of self
- The "you that is always you"
- Self as process and as context
- Alternative to the stories we well tell about ourselves (self as content)

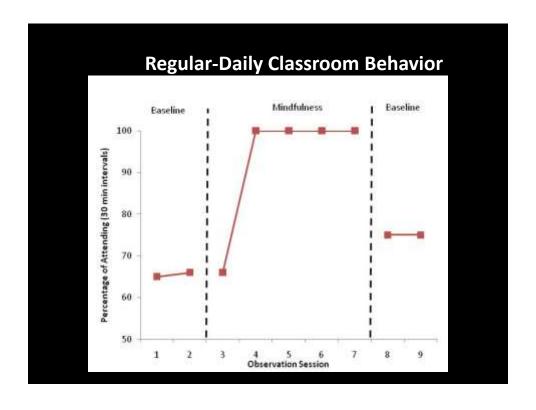






ACT Outcomes									
Rady	Problem focus	Princery microsite	Comparison condition	d(N) post	d (N) F-up	F-up wer			
ECT in compared to structured intercentions in	lesigned to Juguet the pro	Non	ASSESSED IN CO.	ADE VALUE					
Block (2002)	Social phobia	Speaking time	Group CBT	.49 (26)					
Bond and Bunce (2000)	Work stress	GHQ	Workplace innovation	J. (60)	.72 (80)	12			
Ironstatter et al. (2004)	End stage cancer	Distros	CRT	.9 (31)					
Gifford et al. (2004)	Smiking	Not smoking	Nico/size patch	.00 (62)	.57 (55)	52			
Gregg (2004)*	Type II diabetes	Diabetic control	Diabetos edecativo		.57 (710)	12			
Hapen, Bissett et al. (2004)	Stigms and burnout	Madach Burnout Inventory	Biological education	.74 (59)	.61 (53)	12			
Hapes, Bissett et al. (2004)	Stigma and burnout	Madach Burnout Inventory	Multicultural training	26 (64)	.57 (58)	12			
Hayes, Wilson et al. (2004)	Polyenbetance abuse	Objective UA	Methadone maintenance	41 (51)	.95 (43)	24			
Level t et al. (2004)	Agomphobia	Willingness to do exposure	Suppression	.67 (48)					
Zettle and Hayes (1986)*	Depression	BDI	Cognitive therapy	1.25 (11)	.92 (18)	12			
Zettle and Rains (1989)	Depression	BDI	Cognitive therapy	53 (21)	75 (21)				
Zertle (2003)	Math anxiety	MAR5 (Math amiety)	Systematic deservational	- 35 (24)	-,12 (18)				
Weighted average effect size for ACT vs. stru	ctured interventions:			AR (456)	.53 (404)				
ECT as compared to wait list, placebo, or gen			THE SECTION OF STREET						
Back and Hayes (2002)	Psychosis	Rehospitalization	Treatment as usual		.45 (716	16			
Block (2002)	Social phobia	Speaking time	Control	.52 (24)	3-65				
food and Bunce (2000)	Work stress	GHQ	Wait list control	72 69	.7 (80)	12			
Dubl et al. (2004)	Chouse pain	Sids leave (days)	Treatment as roual	1.17 (19)	1 (19)	34			
Jasakano & Herbert (in pensa)	Psychosis	Clinically large BPRS improvement	Enhanced TAU	1.11 (29)*					
Grate and Gunderson (in peace)	10°D	Self hurm	Treatment as social	56 (22)					
LevitS et al. (2004)	Agomphobia	Willingson to do exposure	Distraction	.81 (40)	Service Services				
Londgren (2004) Londgren and Dahl (2005)	Epilepsy	Seigne (requercy × duration	Attention placebo	1.43 (27)	1.25 (27)	54			
Woods et al. (in press)	Trichetillemania	MGH-HS (Hair pulling)	Wait list	1.72 (25)	1170 00000				
Wrighted average effect size for ACT 18, wait		TAG		59 (248)	.71 (176)				
fotal weighted average effect size for ACT vs	, all other conditions			.66 (794)	.66 (580)				

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., Lillis, J. (2006). Acceptance and Commitment Therapy: Model, processes and outcome. *Behaviour Research and Therapy*, 44, 1-25.



Mindfulness in the Pre-K Classroom

- Participants: 3 full time staff members in Pre-K room for typical and DD kids
- Procedures
 - 5 minutes of mindfulness exercises
 - No instruction whatsoever about what experimenter was going to record
 - Experimenter was a mom of a child in room that was there to observe

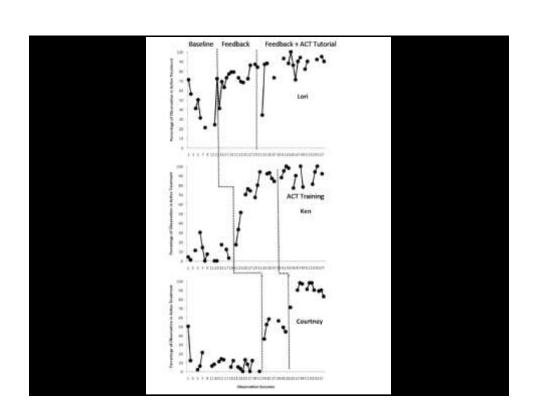


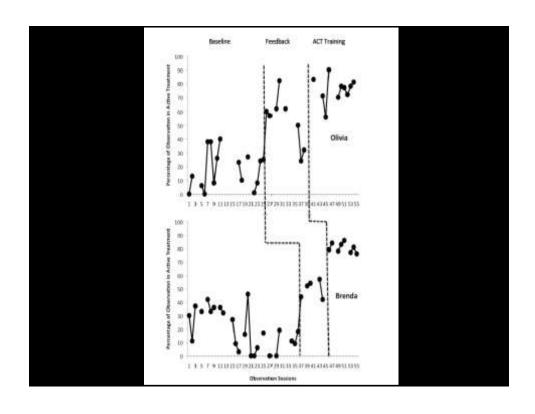
Getting Teachers/Staff on Board

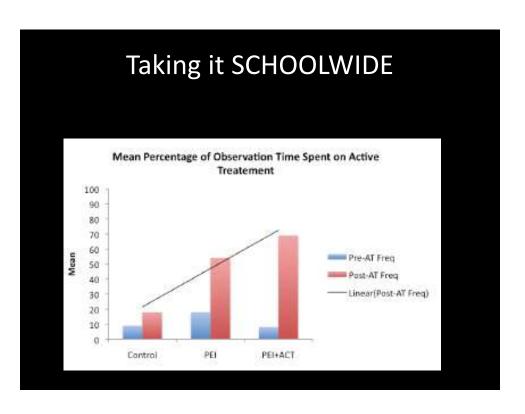
- <u>Participants</u>: 5 full time educational staff for children with autism or other developmental disabilities
- What we did?:
 - On the job feedback, definition of targeted skills, training on implementation, performance tracking
 - Addition of 5 hours of Mindfulness/ACT for the STAFF!
- Did it work?:
 - Percentage of observation interval displaying "active treatment"

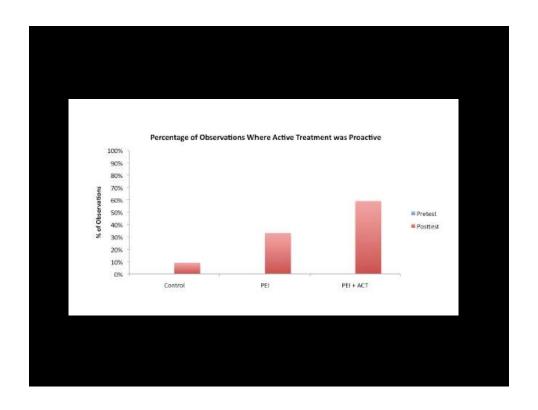
Dependent Variable

 Active treatment definition: the staff member is running a formal instructional program and/or applying incidental teaching procedures with one or more of their assigned kids







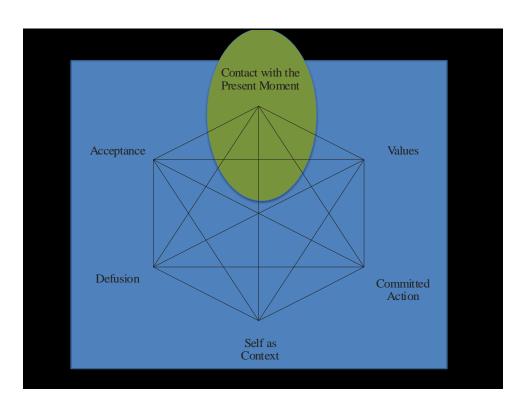


Meditation for the Masses & Classes

- Decrease in anxiety
- Mood change
- Pre-frontal cortex activation
- Immune response







Contact with the present moment

- Basic assumption
 - Living on autopilot
 - Mindless interaction with world within and around us
- ABC's of present moment awareness
 - A wareness of what is here
 - B eing with what is here
 - C hoosing what to do

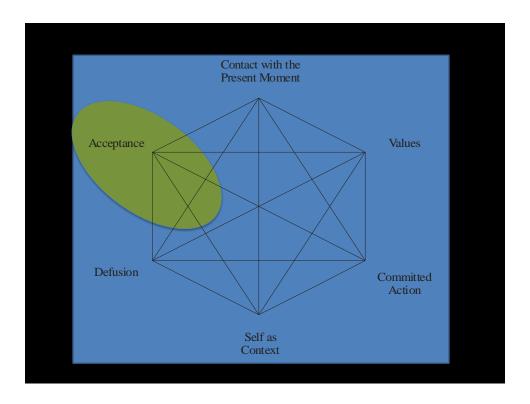
• Primary goal:

- Life is occurring RIGHT NOW
- Making contact with the here and now
- Experiencing both external and internal events
- Practice, practice, practice!

- Clinical example:
 - "I think I'll change my behavior tomorrow"
 - "I can't allow myself to feel the pain, so I fight to escape it"
 - "I'm noticing that when you say the word "autism", I feel a rush of heat in my throat"

Becoming Mindful

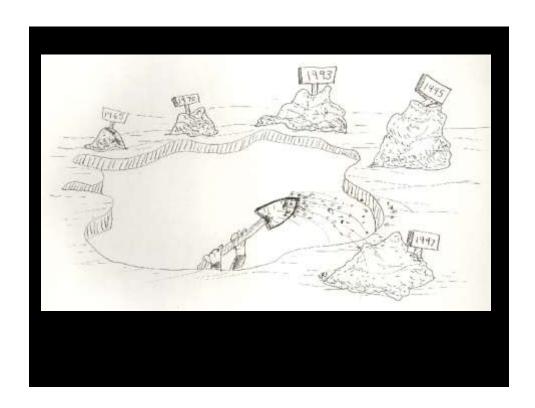
- Sit
- Breath
- Notice the sounds of the room
- Notice your body sensations
- Notice your thoughts
- Why are you here?
- What are you wanting from today, and from your life?



Acceptance

- Basic assumption
 - Human beings tend to engage in avoidance behaviors
 - When you're not willing to have something, you have it!
 - Control is the problem and willingness is the answer

- Primary goal:
 - Undermine experiential control by identifying solution-focused behaviors
 - Developing creative hopelessness
 - Seeing the hopelessness of experiential avoidance
 - Experiential exercise: Man in hole

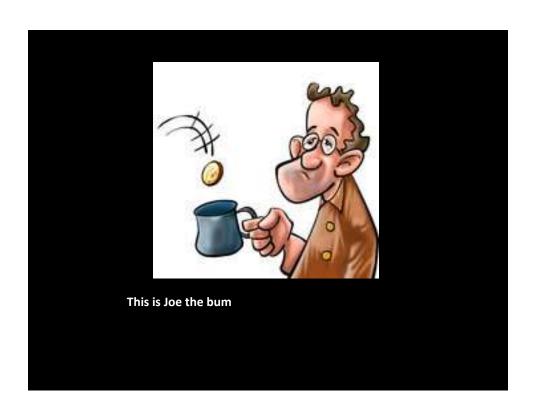


Primary goal cont:

- To help clients see willingness as an ALTERNATIVE to control
- Willingness to experience distress

Willingness

- So what IS willingness?
 - Openness towards WHOLE experience
 - ALTERNATIVE to control
 - Willingness to experience distress
 - Easily embraced in the abstract, but how do you stay committed during difficult experiences?
- Experiential exercise:
 - Joe the Bum



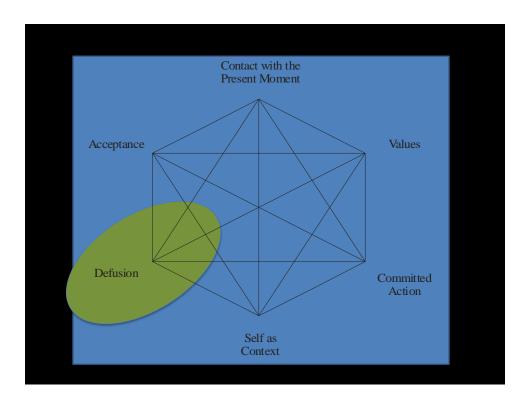






Passengers on the Bus

- Clinical example:
 - "I don't like the feeling I get when I get stressed"
 - Unwilling to "be present" with physiological responses to gambling
 - "If I don't have control over my thoughts, then I know I will get a panic attack"
 - Wanting control in life



Defusion

- Basic assumption
 - Human beings become FUSED to the CONTENT of their thoughts
 - Leading to escape/avoidance
 - The problem is not WHAT we think, it is HOW we relate to what we think
- Don't believe me?

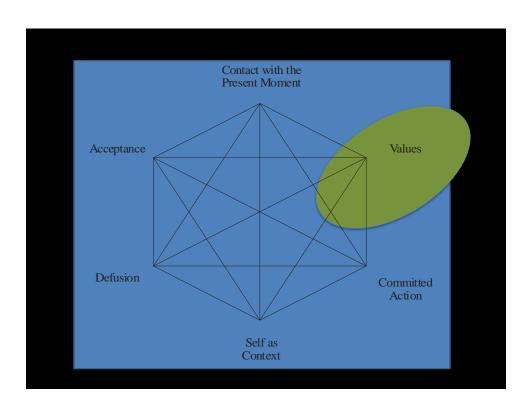
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_		12112			

- Fill in the blank:
 - Blondes have more ______
 - Eeny, Meeny, Miny, ____
 - Little Miss Muffet sat on her _____
- Milk, Milk, Milk
- I'm having the thought that...

• Primary goal:

- Interacting with thoughts as WHAT they are
- Attend to thinking + experiencing as ONGOING process
- De-emphasizing literality of language

- Clinical example
 - "I can't stop thinking about what dad did to me"
 - "I want to stop but I know its not possible"
 - "I need to fight somebody to feel important"
 - Others?

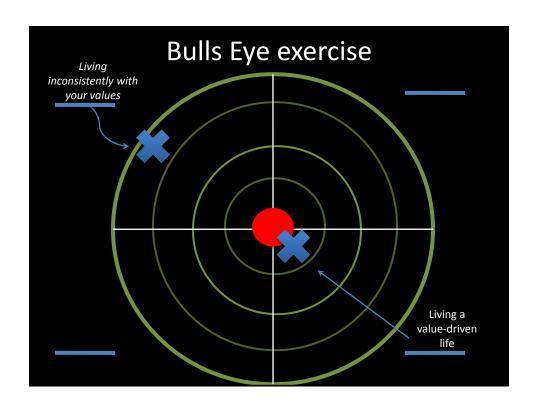


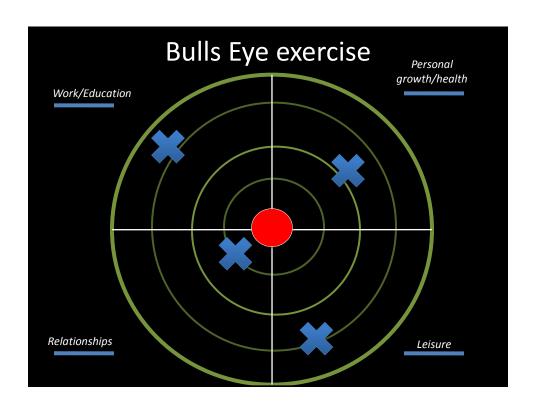
Values

- Basic assumption
 - We put our life on hold while we try to control our suffering
 - We tend to behave in ways that go against what we value
 - · Avoidance behavior
- What are values?
 - Chosen life directions
 - Verbally constructed, globally desired life directions
 - Ongoing PROCESS rather than outcome

(Hayes, Barnes-Holmes, & Roche, 2001)

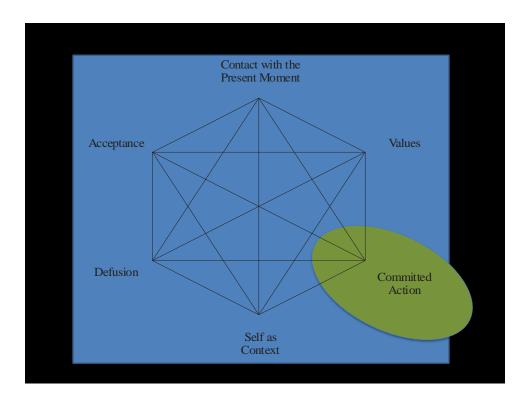
- Primary goals:
 - Clarifying chosen life directions
 - Linking behavior change to those values
 - Willingness to stay on valued path
 - Acceptance and willingness of private events, while remaining committed to values
- Experiential exercise
 - Bulls eye





- How do you know you're not already living a valued life?
- Experiential Exercise:
 - If you died today, what would your tombstone to read?
 - Would would you WANT it to read
 - How are these two different?
- How can you begin to lead a life, where your tombstone would reflect what you WANT?

- Clinical example
 - Identifying values
 - "I value my family, but I don't know how to do things for them"
 - "I can't stop cutting myself, and if my family can't accept it, then maybe I don't need them after all"



Committed Action

- Basic assumption
 - We know what we want to be about, yet we avoid things that may bring pain or suffering to us
 - "If I do not care, I will not be hurt"
- Are you willing to accept whatever discomfort your mind provides you AND commit to your values?

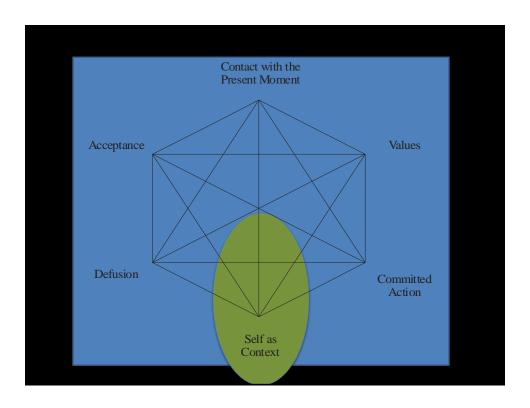
- Focus on building patterns of committed action
- Primary goal:
 - Work for behavior change
 - Making room for automatic reactions and experiences
 - Taking responsibility for ALL patterns of action

- Difference between values and GOALS
 - Values
 - Verbally constructed and never achieved as an object
 - Goals
 - · Values-consistent AND can be achieved
- Patterns of effective action
 - action linked to chosen values.
 - Similar to traditional behavior therapy

- Experiential exercise
 - Eye contact exercise
 - Swamp metaphor
 - SMART goals

Clinical example

- Valuing education, yet keeping child at home because of friction with school staff
- "I want to stop fighting with spouse, but when I see him do something wrong, I cant help myself"
- "I value my child, so I have to put up with all the problem behaviors because that is just part of his disability."



Self as context

- Basic assumption:
 - Taking thoughts out of context
 - Thought become entangled as evaluations and self-conceptualizations
 - Taken as literal truth
- Focus on distinguishing conceptualized self from self as context

			lexercise:	
• FV	naria	ntial	AVATO	JCD.
Lへ	peric	Huai		JJC.

- Fill in the blank
 - I am a person who
 - I am a person who does not _____
 - My favorite thing about me is _______
 - My least favorite thing about me is
- Are you really those things? Could it be your mind telling you that you are?

• Primary goal:

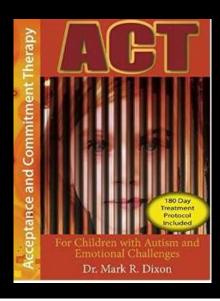
- Making contact with self that is continuous and consistent
- Differentiate between self as CONTEXT from self as CONTENT
- Understand the self as distinct from private events
- What is the "self"?
 - Continuity of consciousness itself (Hayes, 1984)

- Experiential exercise:
 - House and furniture exercise

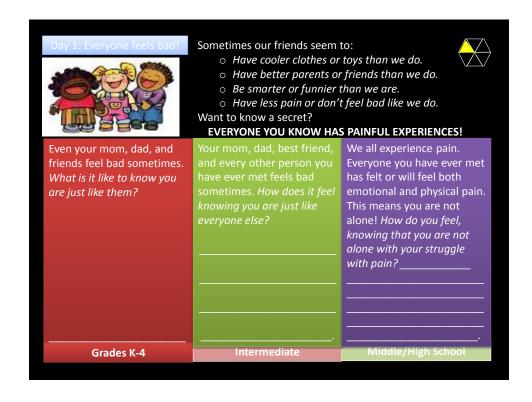


- Clinical example:
 - "I am a rotten person for what I have done to my family"
 - "I am unlovable"
 - "Nobody likes me"
 - "Although I have struggled in the past, I see that my family will always be there for me"
 - "I'm noticing that my mind is telling me that my life will never be the same because of X"

180 Days of Activities



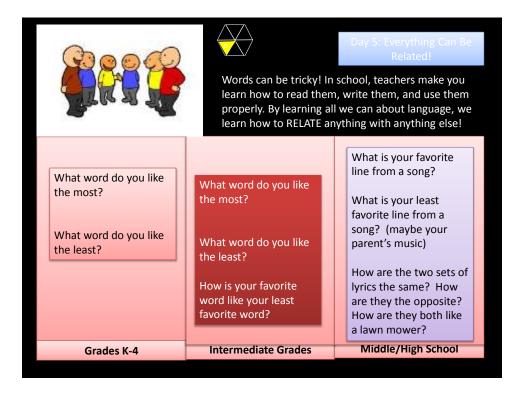
- 5 Years in Development
- Over 300 kids statewide have had the curriculum
- Research undergoing across the country
- Often done with both parent and child together







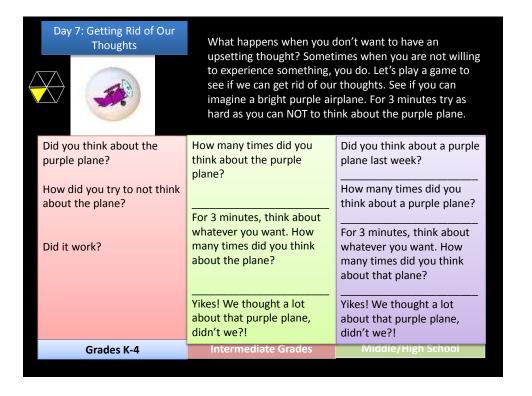
Put the things that make you feel bad in order based on how they have changed your life. Next, draw arrows between things that happen together.

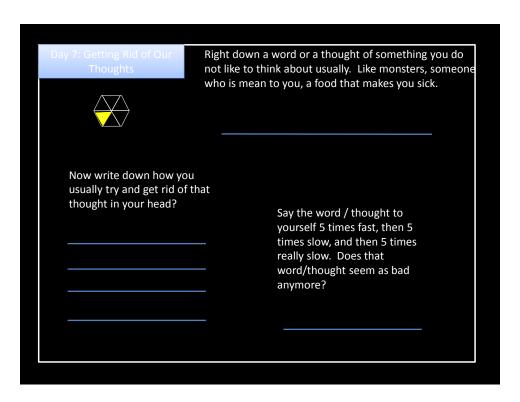


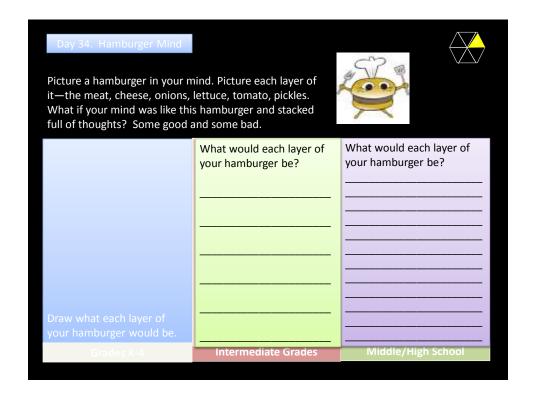


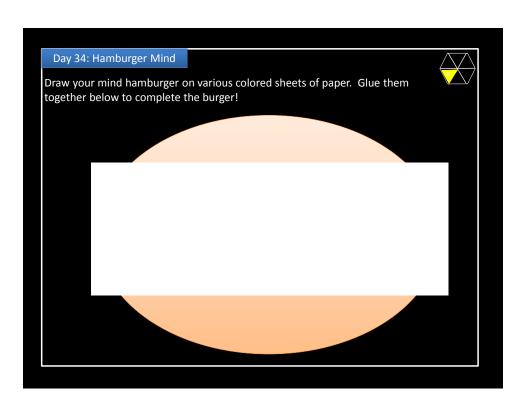


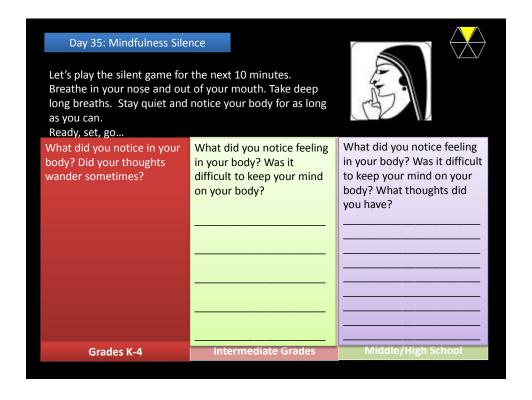
Day 6: The Language Game	
A good thing about words is it lets us talk about our experiences. But, what happens when the sentences are more important to you?	\$ \(\rightarrow \)
The worst thing about me is that I'm	
I'm not a good person, I'm	
Deep down, I'm afraid I'm	
Notice how much harder these were for you. Why do you think that is?	











Day 35: Mindfulness Silence

Write down a thought you have that is something you don't like to have.



Now, for the next 5 minutes, think about this thought, stare at it written above, and notice all the body sensations you have as you sit and notice this thought. Watch how your mind comes and goes from this thought over the next 5 minutes.

Picture that famous purple dinosaur in your head. What does he look like? What does his voice sound like? Now repeat his name over and over again for 2-3 minutes. What happened to the What happened to the picture of him when you picture of him when you were saying the word? were saying the word? Did he get more or less Did he get more or less present in your head? present in your head? Can you still hear his creepy Can you still hear his creepy song? song? Middle/High School **Intermediate Grades**

Draw the purple dinosaur below, but....attach to him a pizza for a head, a bird for one foot, a TV for one of his feet, and a lamp for one of his arms. See how he still is a dinosaur, but drawing him differently makes you think about him differently!



Often times we just eat and don't even think about what we are eating. Maybe that is sometimes why we eat too much some times and feel sick. Eat your snack and think about the food you are eating. Where did it come from? How far did it travel? How many people touched it before it reached your hands?

Eat ½ of your snack now? Was it good?

Eat the other ½ of your snack really slow. Count to 10 before every chew you make. Which part of your snack tasted better?

Take ½ of your snack and eat it like you always do. Write 2 things about your snack (taste, smell, etc.)

Eat your next ½ of your snack very slowly. So slow you have to stare at every piece for 1 minute before you eat it. Then, you need to keep each piece in your mouth for 1 minute before you swallow.

Intermediate Grades

Take ½ of your snack and eat it like you always do. Write 2 things about your snack (taste, smell, etc.)

Eat your next ½ of your snack very slowly. So slow you have to stare at every piece for 1 minute before you eat it. Then, you need to keep each piece in your mouth for 1 minute before you swallow.

Middle/High Schoo

Day 37: Mindful Eating

Get on the computer and become a snack detective. Find out where your favorite snack came from. Where did it come from (city and state)? How far did it travel (miles to your table)? How many people touched it before it reached your hands (guess)? Was it grown in the earth or made by chemicals and machines? Draw the path of your food from its "birthplace" to your mouth below.

The word "dragon" makes people think of very big scary fire breathing beasts that are powerful. Some of your thoughts are like dragons. These dragon-thoughts control you and have lots of power. Yet, not all dragons are powerful. Putting the word "paper" in front of dragon makes this mean powerful beast seem a bit silly. He has no more power. What are two dragon What are two dragon thoughts you have that thoughts you have that What is a dragon thought control you? control you? you have? How can you make this Rename these thoughts so Rename these thoughts so dragon into a "paper" they seem almost as weak they seem almost as weak dragon? Can you call this as a paper dragon. as a paper dragon. thought another silly name? Intermediate Grades Middle/High School

History of Journeys

• 2010-2012

 ACT for Children with Autism and Emotional Challenges was piloted in ED/BD classrooms for students to difficult for typical school settings to handle. Population was made up of multiple-district students that were combined into an intensive self-contained learning environment.

2012

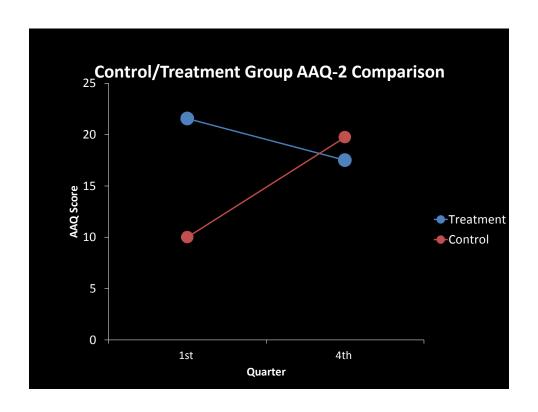
- Commitment of an entire school building by Jerseyville, IL school district to hold a larger-scale program for children $5-12^{\rm th}$ grade.
- K-4 would remain in prior locations
- ACT would be delivered every day at the start of the day. 30 minutes group setting. Each of the 180 days found in Dixon's book was delivered in order
- Educational coursework done via PSI (computerized self-paced; target at level of each individual learner).
 Teachers served as coaches, facilitators, and therapists throughout the day.

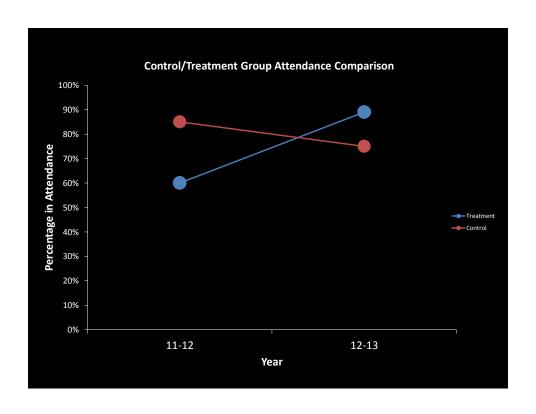
2013

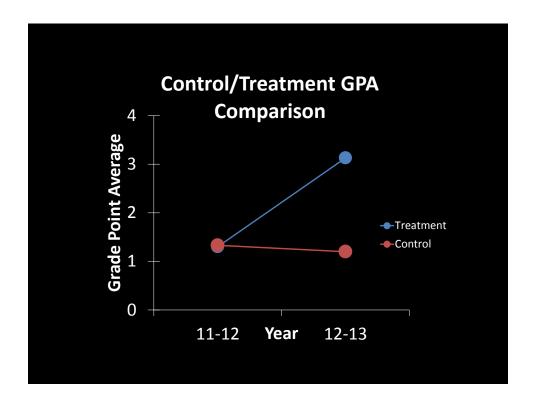
- Outcome study of 9 students that attended program from day 1-180.
- Control group of matched disability and SES level which remained in "typical" district classrooms
- Disabilities included autism, emotional disorder, conduct disorder, and behavioral disorder

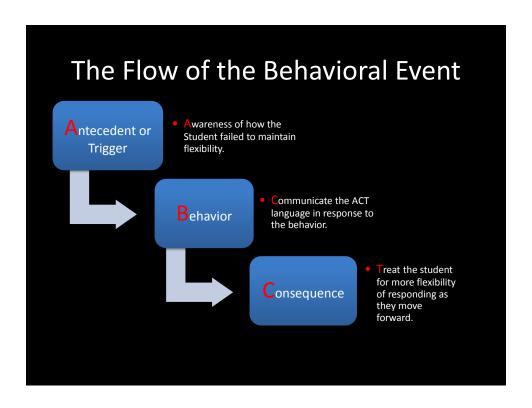
2012-15

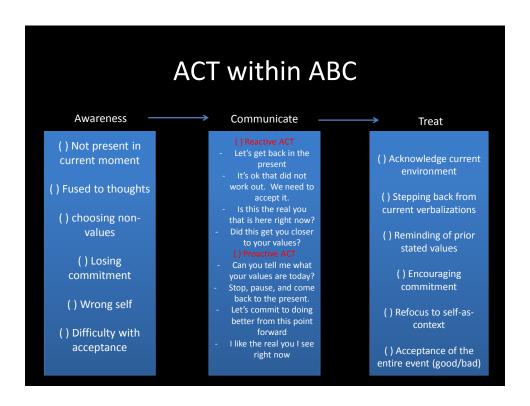
- Population growth from 14 to 40 students
- Graduation rate 100 percent of seniors
- Doubling of GPA
- Increased attendance
- Decrease in psychological inflexibility
- Multiple replication sites have been developed statewide











Kelly, was a 12 year- old girl who was diagnosed with autism at age 5 and since her diagnosis has been receiving home-based behavioral intervention. She currently receives home based ABA therapy once a week for 2 hours. The focus of these sessions is teaching social and independence skills. Kelly is in an integrated grade 7 class and has a personal education assistant for 20% of her school day. Kelly's extracurricular actives include Girl Guides, piano lessons, youth group at her church, and swimming. Kelly's parents 17are concerned about her low self-esteem which is exhibited through Kelly saying negative things about herself. Often these negative self comments take the form of statements such as "I'm so stupid," "I'm fat," or "I'm an idiot." Kelly found out within the last year that she has autism, and her parents report that she is sensitive about her diagnosis.

Jake, a 8-year-old boy who was diagnosed with autism at age 5 and since then has been receiving home-based behavioral intervention services. Jake is in an integrated grade 2 class and has a personal education assistant for 100% of his school day. Jake's extra-curricular activities includes being part of a bowling league. Based on his school's academic assessments Jake has been diagnosed with being gifted and is above grade level in all subjects except English which he is currently functioning at a grade level. The behavior that is of concern to Jake's mother is the tantrums that he displays in her presence following having something not go his way. Jake's parents describe him as a "perfectionist." The tantrums that Jake has are operationally defined as any of the following behaviors in isolation or combination: yelling, throwing items, running away, dropping to the floor and/or crying. In order to be considered more than one tantrum, Jake must be calm (e.g., no yelling, throwing items, running away, dropping to the floor and/or crying) for 5 five minutes between the two tantrums. If Jake has a tantrum at home following not being able to get his way the consequences that are provided by Jake's mother are one or some combination of loss of computer time (a highly preferred activity), a time-out, or being required to finish the task he wants to escape (e.g., homework).

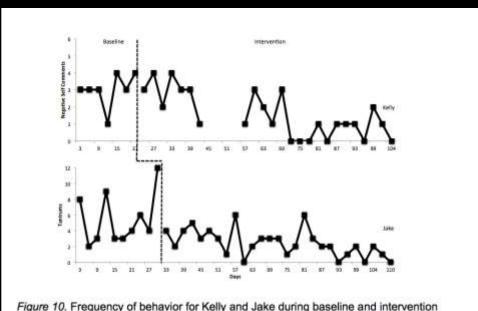


Figure 10. Frequency of behavior for Kelly and Jake during baseline and intervention phases. Note: from days 43 to 56 Kelly was on vacation and data was not taken.



