

Mindfulness in Times of Stress... And How to Introduce it to Teens

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Outline

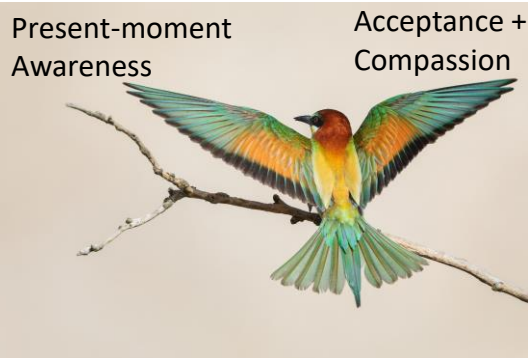
- What is mindfulness?
- Science vs. Hype: What is the evidence?
- How do we engage children and adolescents in mindfulness activities?

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What is mindfulness?

“Paying attention in the present moment...
on purpose... in a non-judgmental way.”

(Jon Kabat-Zinn, 1997)



(adapted from Tara Brach)

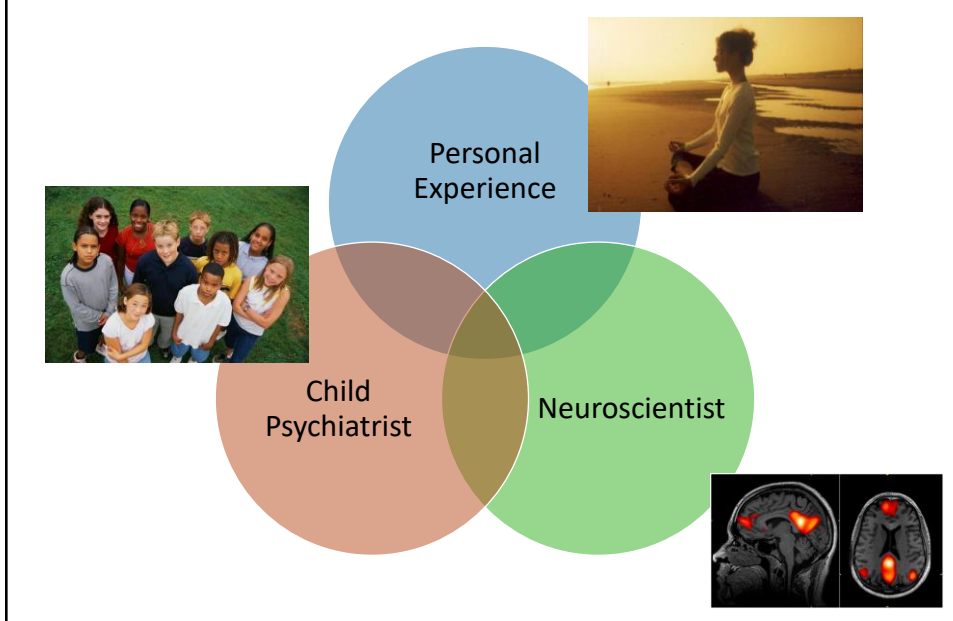
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Mindfulness is **not** the same as:

- Meditation
- Relaxation
- Thought stopping
- Guided imagery
- The answer to everything for everyone

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Why am I interested in mindfulness?



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Mindfulness Meditation Training Interventions

- 8-week Mindfulness-Based Stress Reduction (MBSR)
- 8-week Mindfulness-Based Cognitive Therapy (MBCT)
- Others: Brief experimental trainings (e.g., three 25-minute guided mindfulness meditation exercises); Integrative Body-Mind Training (IBMT), etc.
- Component of DBT and ACT



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Interventions for Children and Adolescents

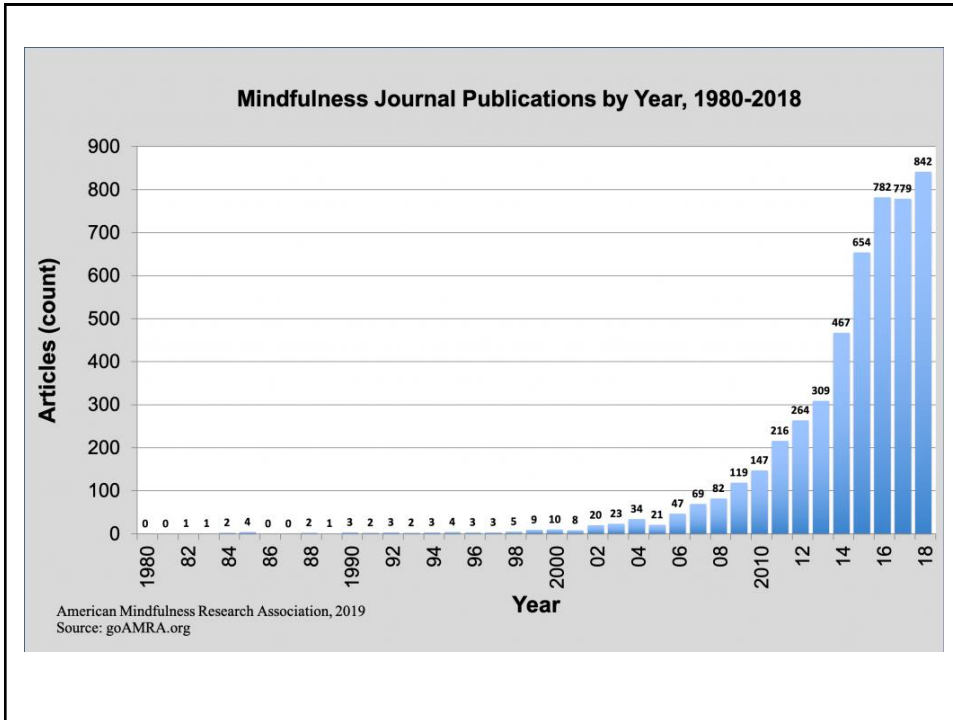
- MBCT for Children and Adolescents (MBCT-C)
- MBSR for Stressed Teens
- School-based programs: Mindfulness in Schools Program, Mindful Schools Project, etc.
- DBT for adolescents with bipolar disorder
- ACT for adolescents

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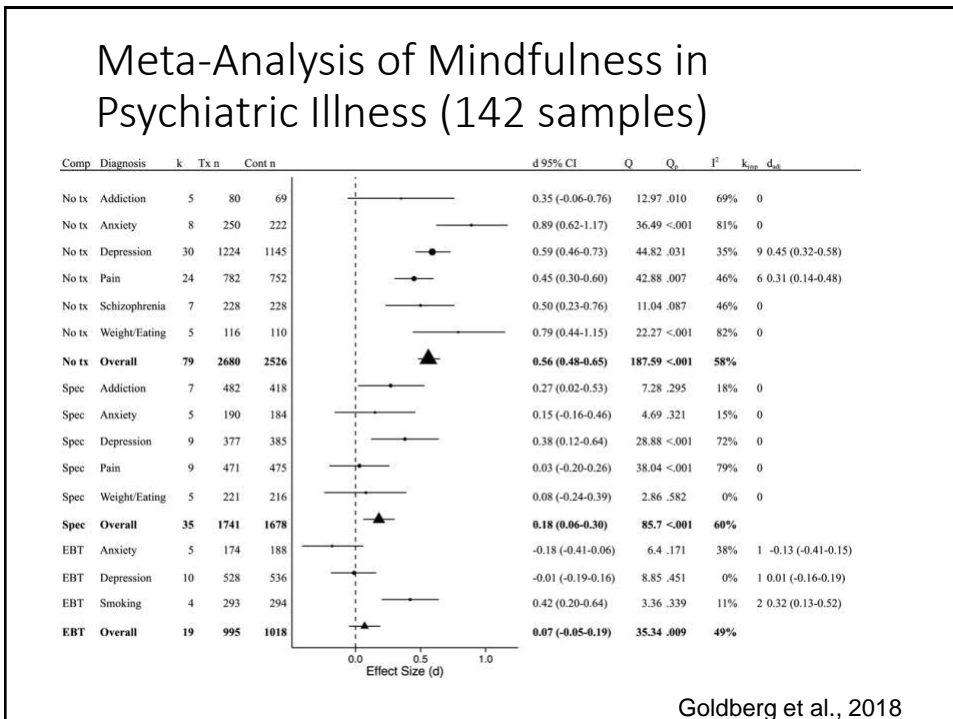
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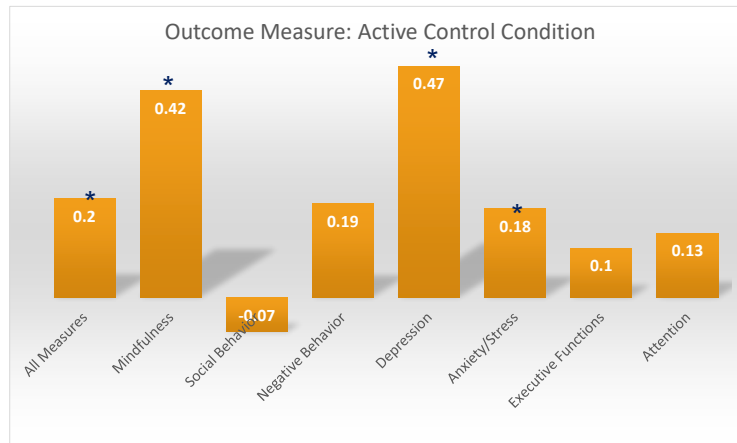


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Meta-Analysis in Children and Adolescents (33 studies)



Dunning et al. 2019

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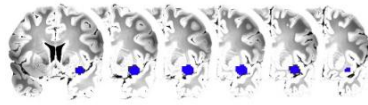
Effects of MBIs in Children and Adolescents: School Meta-analysis (“process” outcomes)

Outcome domain	<i>k</i>	<i>n</i>	Treatment effects		<i>p</i>
			<i>g</i> (<i>SE</i>)	95% CI	
Mindfulness					
Pre-post	12	213	0.174 (0.064)	[0.032, 0.316]	0.021
Controlled	15	1108	0.510 (0.199)	[0.082, 0.939]	0.023
Attention					
Pre-post	8	557	0.324 (0.036)	[0.232, 0.415]	<0.001
Controlled	10	1243	0.291 (0.071)	[0.124, 0.456]	0.004
Meta-cognition and cognitive flexibility					
Pre-post	3	33			
Controlled	9	806	0.404 (0.170)	[0.011, 0.798]	0.045
Emotional or behavioral regulation					
Pre-post	17	976	0.297 (0.038)	[0.213, 0.381]	<0.001
Controlled	16	1404	0.322 (0.066)	[0.180, 0.464]	<0.001

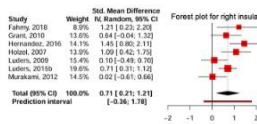
Klingbeil et al., 2017

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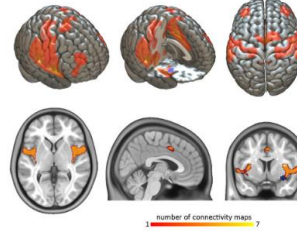
Mindfulness Training Changes Your Brain: Meta-analysis of



Effect size meta-analysis and statistical power



Functional connectivity summary maps



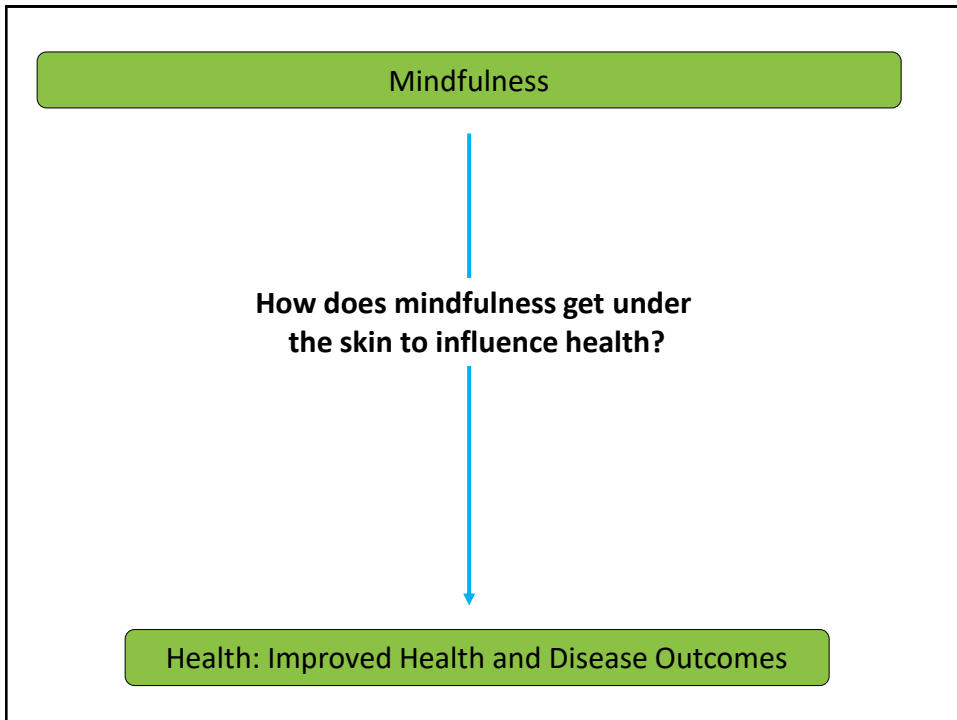
(Pernet et al., 2021)

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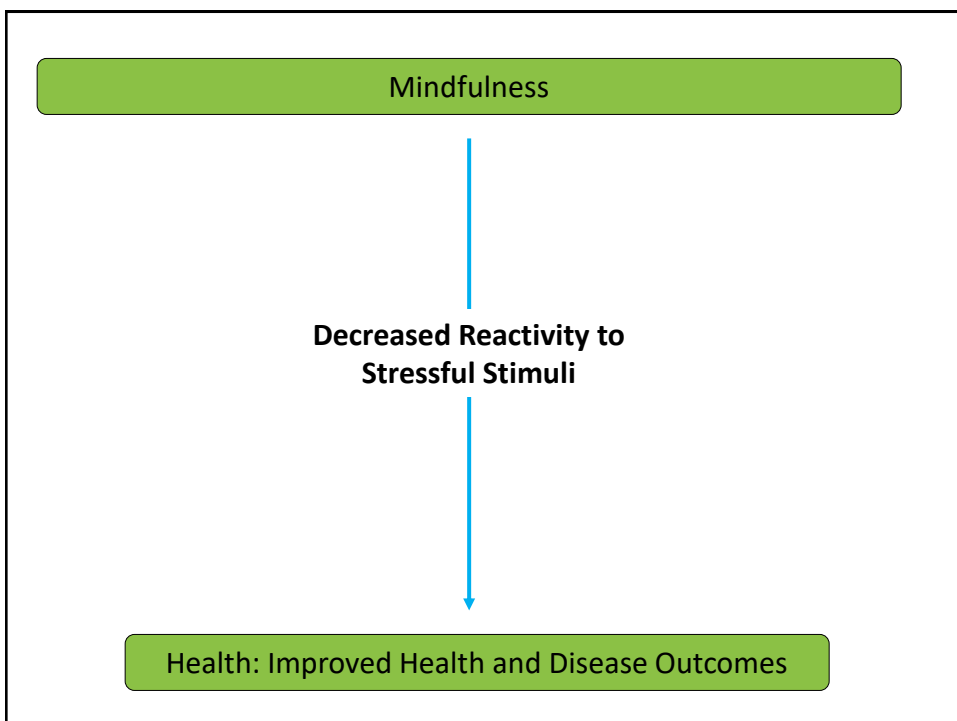
Mindfulness Training RCTs for Health

- **HIV/AIDS:** mindfulness training slows HIV-progression in stressed HIV+ adults (Creswell et al., 2009; Seyed Alinaghi et al., 2012)
- **Depression:** reduces depression relapse in at-risk individuals (Teasdale et al., 2000; Segal et al., 2010)
- **Stress in Youth:** reduces anxiety, emotional lability, depression, and PTSD symptoms in children and adolescents (Biegel et al., 2009; Semple et al., 2010; Sibinga et al., 2015)
- **Drug Abuse:** reduces drug relapse and heavy drinking in substance abusing individuals at 12-month follow-up (Bowen et al., 2014)
- **Medical Symptoms:** accelerates skin clearing in psoriasis patients (Kabat-Zinn et al., 1998)

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The Mindfulness Stress Buffering Hypothesis

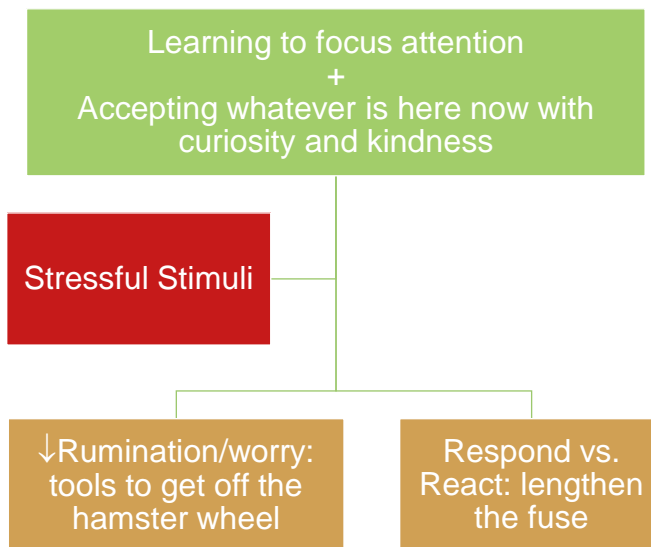
- ❖ Mindfulness skills (attention + acceptance) are critical components for **stress regulation** and **resilience**
- ❖ Effects will be observed in **high-stress populations** for which stress is known to affect the onset or exacerbation of disease-pathogenic processes



(Creswell & Lindsay, 2014)

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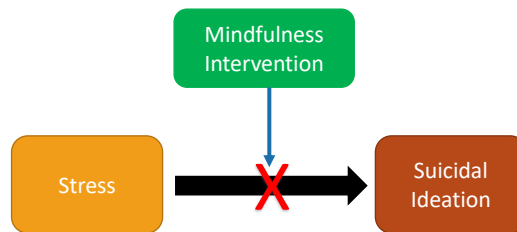
How does this help?



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Mindfulness and Suicidal Ideation

- Multiple studies have found that MBIs can decrease suicidal ideation (meta-analysis; Schmelefske et al., 2020)
- But... no large-scale, high-quality RCTs
- Possible pathway:



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How to Adapt for Kids/Teens

- Make it relevant
- Shorter Practices with Catchy Names
- Practical Exercises to use when Stressed
- Engaging the Senses
- Non-Judgmental Stance

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Mindful Moments

- 8-week program
 - Based on MBSR and MBCT
 - With materials from Mindfulness in Schools Project (.b), ACT, Headspace
- Sample:
 - 10-14 years old
 - Familial risk for bipolar disorder
 - Elevated mood lability
- Target: Mood Lability, Mood Swings



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Qualitative Feedback: Do you notice changes?

- *Child Report: 13/20 noticed changes at 3-mo follow-up*

“I have noticed that I have calmed down a lot more and I can concentrate more often”. “My body and my mind feel much better. It helped when I get mad and sad. It has helped me think about how I act, feel, and behave.” “I am just more aware of my surroundings.” “I started to notice things I’ve never noticed before.” “I was a lot more chill and calm than usual” “Yes I sleep much better” “Yes, I’m calm compared to my rage personality” “I have been a lot better at home and school” “Yes I have been more positive than usual feels weird.” “more relaxed and ‘chill’” “I feel calmer in my life knowing I have ways to help me when I’m sad.” “I have been a lot calmer” “Getting to be able to calm down instead of freaking out”

- *6/13 mention the word “calm”*

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Qualitative Feedback: Do you notice changes?

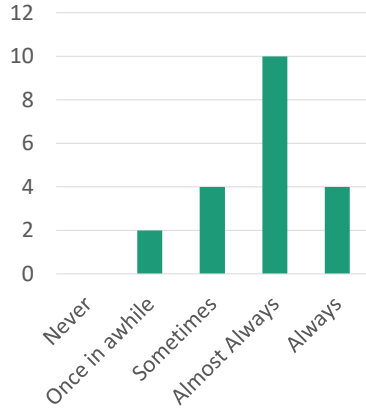
- *Parent Report: 13/20 noticed changes at 3-month follow-up*

“Better decision making; able to find different ways to recognize when she needs to take a moment to think” “Easier to calm her down.” “a lot calmer” “she has learned some self soothing” “Yes slightly more patient” “She talk more about her problems now.” “He is able to calm down faster and he uses a lot of the techniques from group while on the PlayStation with friends.” “Yes. He’s matured a lot since this program and he doesn’t have as many angry outburst as he used to.” “he’s doing better” “Yes, sometimes she is very open when she was not as talkative. Always she loves coming to groups and meeting new people.” “yes we use the meditation techniques on a daily basis.” “She has really seemed calm. She is not lashing out in anger or having tantrums. She said she used the techniques when she was doing her play at school.” “YES – he is an entirely different, emotionally healthy, person.”

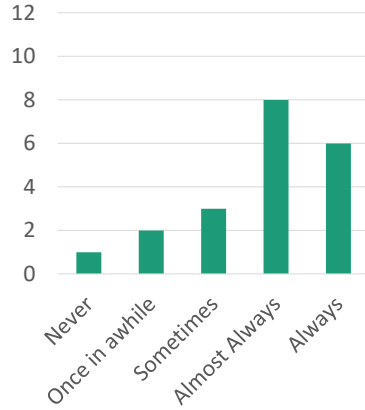
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Parent and Child Feedback: 3-month follow-up

My child enjoyed going to mindfulness groups:



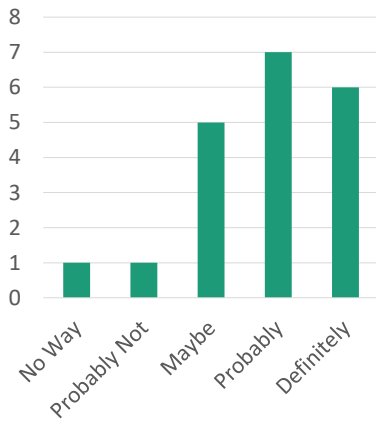
I enjoyed going to mindfulness groups:



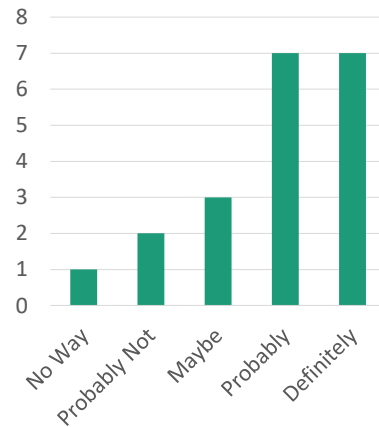
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Parent and Child Feedback: 3-month follow-up

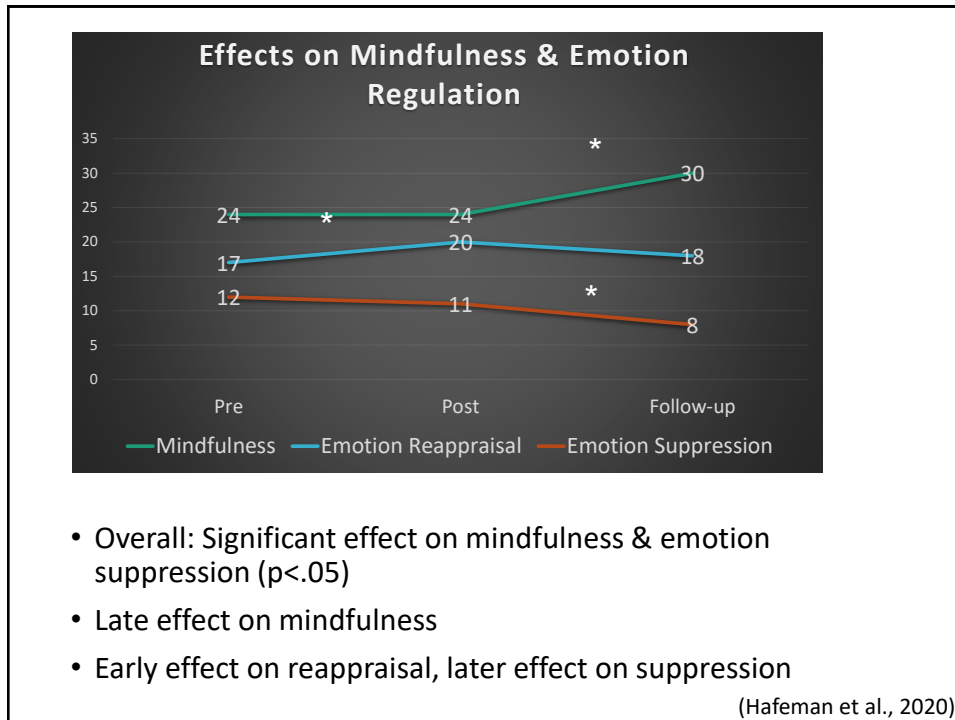
I feel this program helped my child with mood swings:



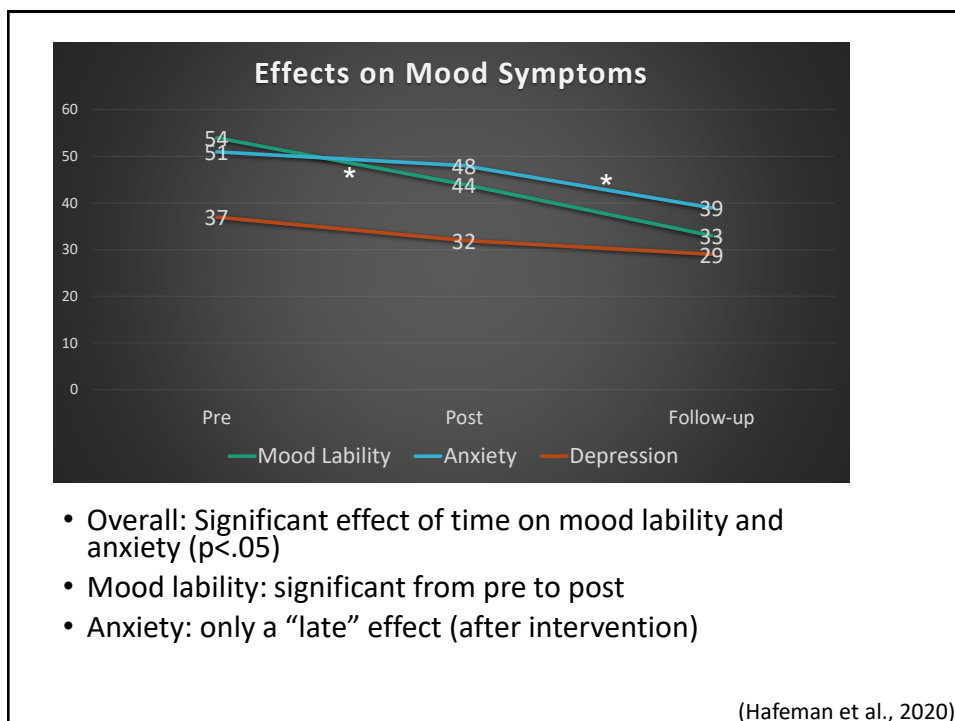
I feel this program helped me with mood swings:



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Mindful Moments

- Wk 1: Introduction: What and why?
- Wk 2: Play Attention
- Wk 3: Being With (Acceptance, Curiosity, Kindness)
- Wk 4: Recognizing Worry
- Wk 5: Stepping Back
- Wk 6: Waking up to Now
- Wk 7: Flow
- Wk 8: Bringing it Together... and Forward

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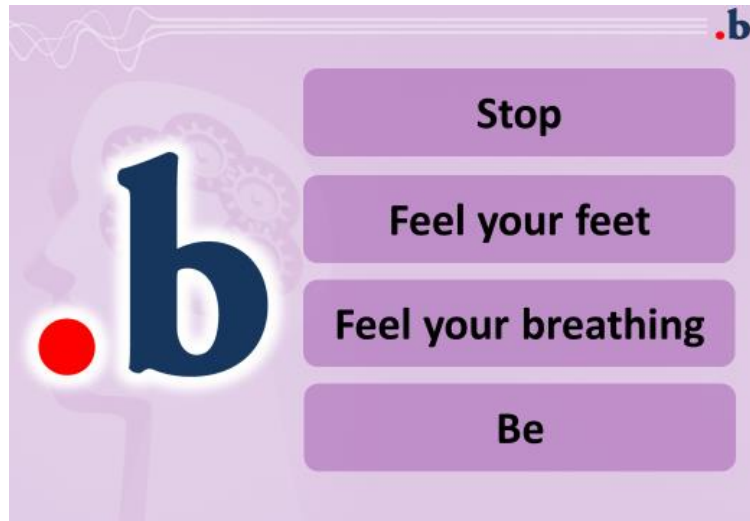
Week 1: Mindfulness: What is it good for?



Release Video: <https://www.youtube.com/watch?v=GVWRvVH5gBQ>

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Week 1: Core Mindfulness Practice



Mindfulness in Schools Project, .b

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Week 2: Let's play with our attention



-
- Theme: From the outside in
 - Exercises:
 - Tea Light Exercise: focus on the tealight, see the after-image
 - CLAP-1-2-3: Feel the sensations after clapping

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Week 2: Attention is like a puppy!



<https://www.youtube.com/watch?v=5iTTNRE-njM>

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Week 3: Being With

- Theme: Being present with compassion and kindness. Grounding in the storm.
- Practices: Mountain Meditation



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Week 3: Being with (internal hijackers)



ACT: <https://www.youtube.com/watch?v=aJJicPetniQ>

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Week 4: Recognizing Worry

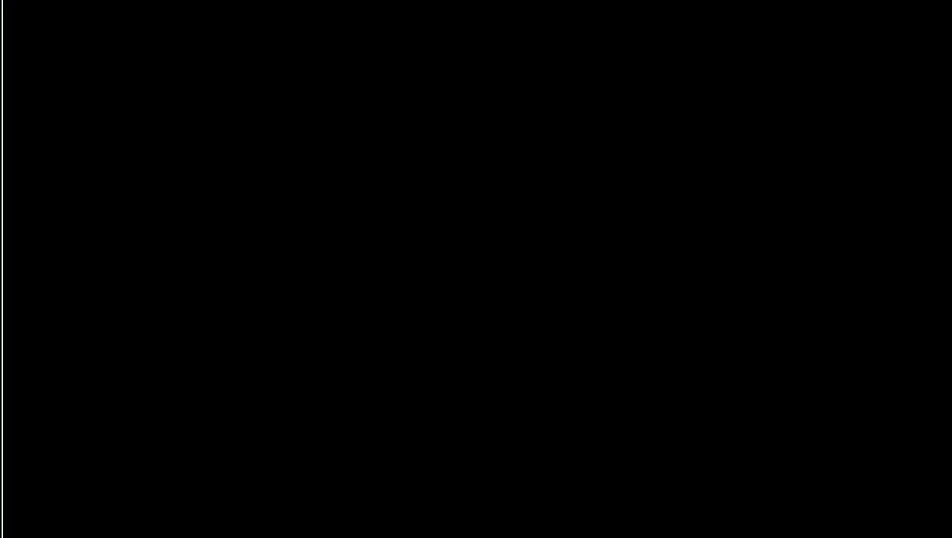
- Theme: The mind tells stories... That is what minds do best!
- Practices:
 - Don't believe everything you see (or think)
 - CBT+ concepts: Separating out situation, thoughts, feelings, body sensations
 - Body Scan

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CBT+: Situation, thoughts, emotions, body sensations



Beyond Blue: Unit 2, Clip 2 Self-Talk (<https://www.youtube.com/watch?v=UiQxxItGAog>)

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Week 5: Stepping back

- Theme: Changing our relationship to our thoughts. Watching thoughts go by like traffic on a road.
- Practices:
 - Stream-of-consciousness journaling
 - Mindfulness of Judgements
 - Mindful Humming

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Week 6: Waking up to now

Themes:

- Autopilot
- Using the sense of taste to be in the present moment
- Respond vs. React

Mindful Eating

- Hershey Kiss
- Fireball
- Harry Potter Jelly Bean

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Week 6: Waking up to Now



Mindfulness is being alive and knowing it, a .b animation by MiSP

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Week 7: Flow/Mindful Movement

- Theme: We can also be mindful when completely immersed in an activity (e.g. sports, music)
- Practices:
 - Hands around the table
 - Mindful coloring
 - Mindful walking

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Week 8: Bring it together... and forward

- Theme: What have we learned? How can we apply this to our lives?
- Activities:
 - List mindfulness activities.
 - Mindful Moments: Situations presented: what mindfulness practice could be useful?
 - Letter to my future self (to be sent in 2-3 months)

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As important as the actual practice...

- Reflection: Encouraging noticing
- No right or wrong answers
- Separating out raw experience from judgement
- Not judging the judgement

And...

- Shaping group behavior to facilitate mindfulness practice

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How to adapt this practically

- Refer youth to a mindfulness group
- Use brief grounding exercises (e.g. .b)
- Importance of developing a practice
 - Able to teach/model mindfulness principles
 - Can help with difficult encounters/moments

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Resources

- *Mindfulness Groups/Programs*
 - Awaken Pittsburgh (Stephanie Romero)
- *Online Resources*
 - Smiling Mind
 - Headspace
 - Stop, Breathe, & Think
- *Books*
 - The Mindfulness Matters Program for Children and Adolescents (Randye Semple, Christopher Willard)

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Take-home Messages

- Mindfulness is the intention of bringing awareness, kindness, and compassion to whatever is happening now
- Practicing mindfulness can improve response to stressful situations
- With adaptations, mindfulness can be accessible and useful to teens

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Acknowledgements

Participants and Families

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