

# **Soles of the Feet:**

## **A brief mindfulness intervention for disruptive behavior**

March 13<sup>th</sup> 2026

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# Objectives

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- Theoretical foundations
- Applied research outcomes
- Short break and Q&A
  - Please put questions in the chat
- Soles of the Feet mindfulness-based program
- Discussion of further training
- Q&A

# Acknowledgements

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- Teachers, students, school staff, students/clients, and all other community partners
- **Land acknowledgement of the Haudenosaunee Confederacy**

# Disclosure

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Drs. Felver and Singh receive royalties from  
***Mindfulness in the Classroom: An Evidence-Based  
Program to Reduce Disruptive Behavior and Increase  
Academic Engagement***

(New Harbinger Publications)

# Josh Felver, PhD ABPP

- CNY roots & University of Rochester
- Post-bac: RA at Brown University DPHB
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  - Drs. Merrell, Horner, and Singh
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- Post-doc fellowship: Bradley School/Brown University
- Faculty at Syracuse, SUNY Upstate, & Cornell University
- **Faculty at Binghamton University (social work)**

# Professional interests

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## □ Research

- ▣ developing, implementing, and exploring mindfulness-based programming in school and community settings to promote health equity

## □ Teaching

- ▣ engaging student learning through applied research, practicum, externship, and service-learning experiences
- ▣ clinical and translational science methodology

# Professional interests

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## □ Extension

- mental health promotion
- technical assistance for systems-level intervention implementation
- program evaluation

## □ Clinical

- evidence-based practices for school-age youth and families
- mindfulness-based programming for youth, parents, and teachers

# Intention setting: public health impact

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- Per the Constitution of the WHO...
  - ▣ *Not merely absence of disease*
  - ▣ *Complete physical, mental, and social well-being*
  - ▣ *Capacity to fulfill potentials*
  - ▣ *Fundamental human right*
  - ▣ *\*Healthy child development is foundationally important\**
- Identity and positionality
- ***“Education is the most important modifiable social determinant of health.”*** The Lancet Public Health 2020

# What is mindfulness?



*Mindfulness is the awareness that arises through paying attention on purpose, in the present moment, and nonjudgmentally in the service of self-understanding and wisdom*

-Jon Kabat-Zinn

*The self-regulation of attention so that it is maintained on immediate experience ... an orientation that is characterized by curiosity, openness, and acceptance*

-Bishop et al., 2004

# What is mindfulness?

- Answers will vary (humanities scholar, psychologist, researcher, practitioner by lineage)
- A visual conceptualization...



## Context

...attention...  
on purpose...  
in the present  
moment...  
nonjudgmental

# Mindfulness-based programming (MBP)

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## Core components of MBP for youth

- ▣ Self-awareness
- ▣ Non-judging
- ▣ Focused attention
- ▣ Orienting present moment
- ▣ Acceptance
- ▣ Compassion
- ▣ Somatic awareness
- ▣ Non-reacting
- ▣ Decentering

**Citation:** Felver et al. (2023). Identifying Core Program Components of Mindfulness-Based Programming for Youth. *Mindfulness*

# Soles of the Feet

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- Brief mindfulness-based program
  - ▣ Typically five 30-minute sessions (individual or group)
  - ▣ Scaffolded practice for fluency; in vivo exposures
- Reduces disruptive behaviors stemming from intense unpleasant emotions
- Simple, repeatable routine:
  - ▣ Non-judgmental awareness of experience
  - ▣ Redirecting attention to somatic sensations of feet
- Mindfulness Stress Buffering Theory & Behavioral Theory

# Theoretical foundations (Ash..., & Felver, 2025)

- 1) Stressors cause stress which affects health
- 2) Stressor exposure is difficult to mitigate given heterogeneity and scale
- 3) Individuals can learn skills to respond to stress  
**Stress Buffering Theory** (Cohen & Wills, 1985)
- 4) Specific groups have disproportionate stressor burdens  
**Minority Stress Theory** (Frost & Meyer, 2023)
- 5) Mindfulness based-programming (MBP) alters stress  
**Mindfulness Stress Buffering Theory** (Creswell & Lindsay, 2014)

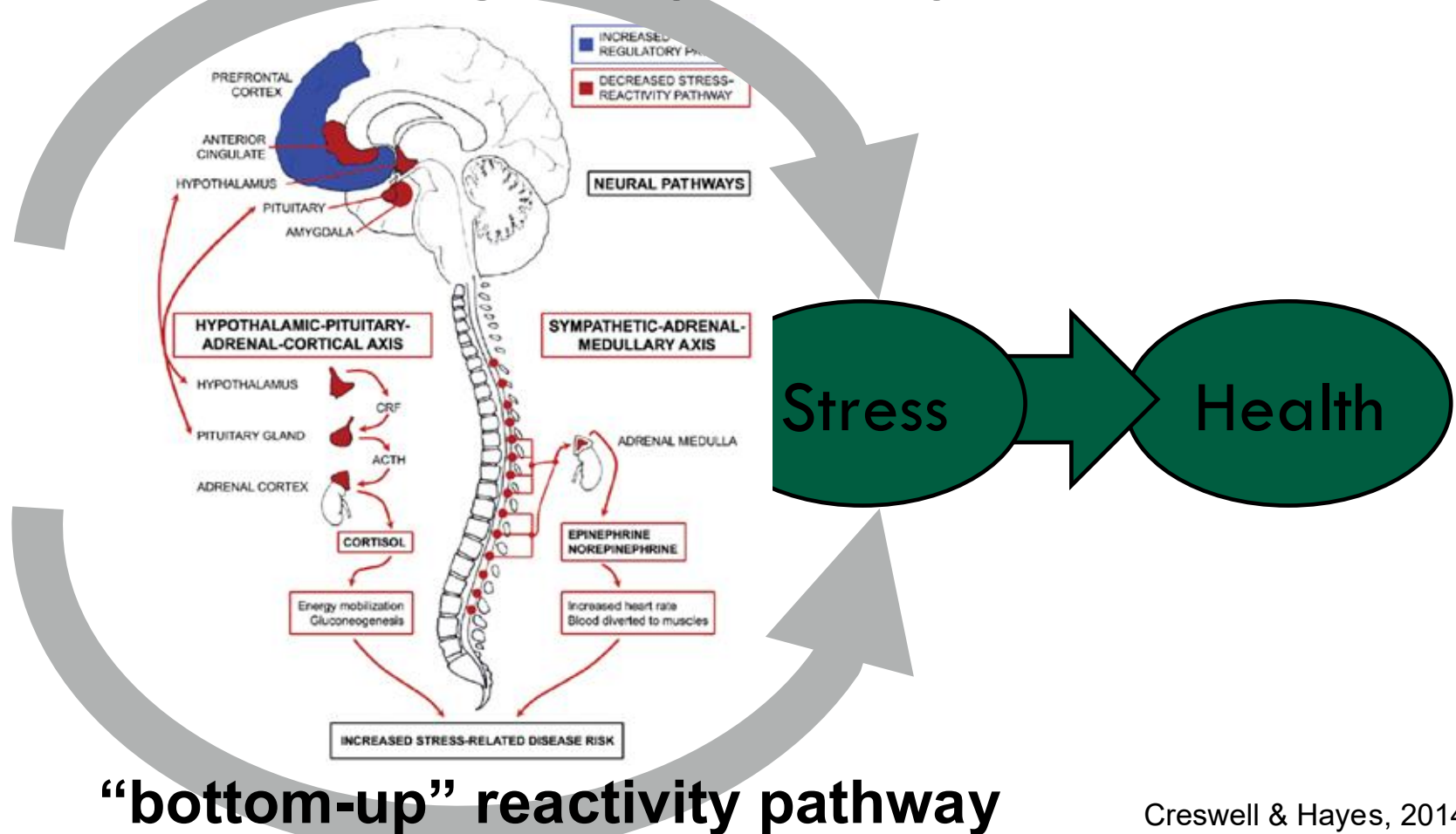
# Theoretical foundations

## **Mindfulness Stress Buffering Theory** (Creswell & Lindsay, 2014)

- Top-down regulatory pathway
  - Inhibition of stress processing regions
  - Alteration of stress & emotional regulation brain activity
- Bottom-up regulatory pathway
  - Reduce reactivity of stress processing areas of body
  - Alterations of sympathetic (i.e., fight, flight, or freeze response) and parasympathetic activation patterns

# Theoretical foundations (Ash..., & Felver, 2025)

“top-down” regulatory pathway

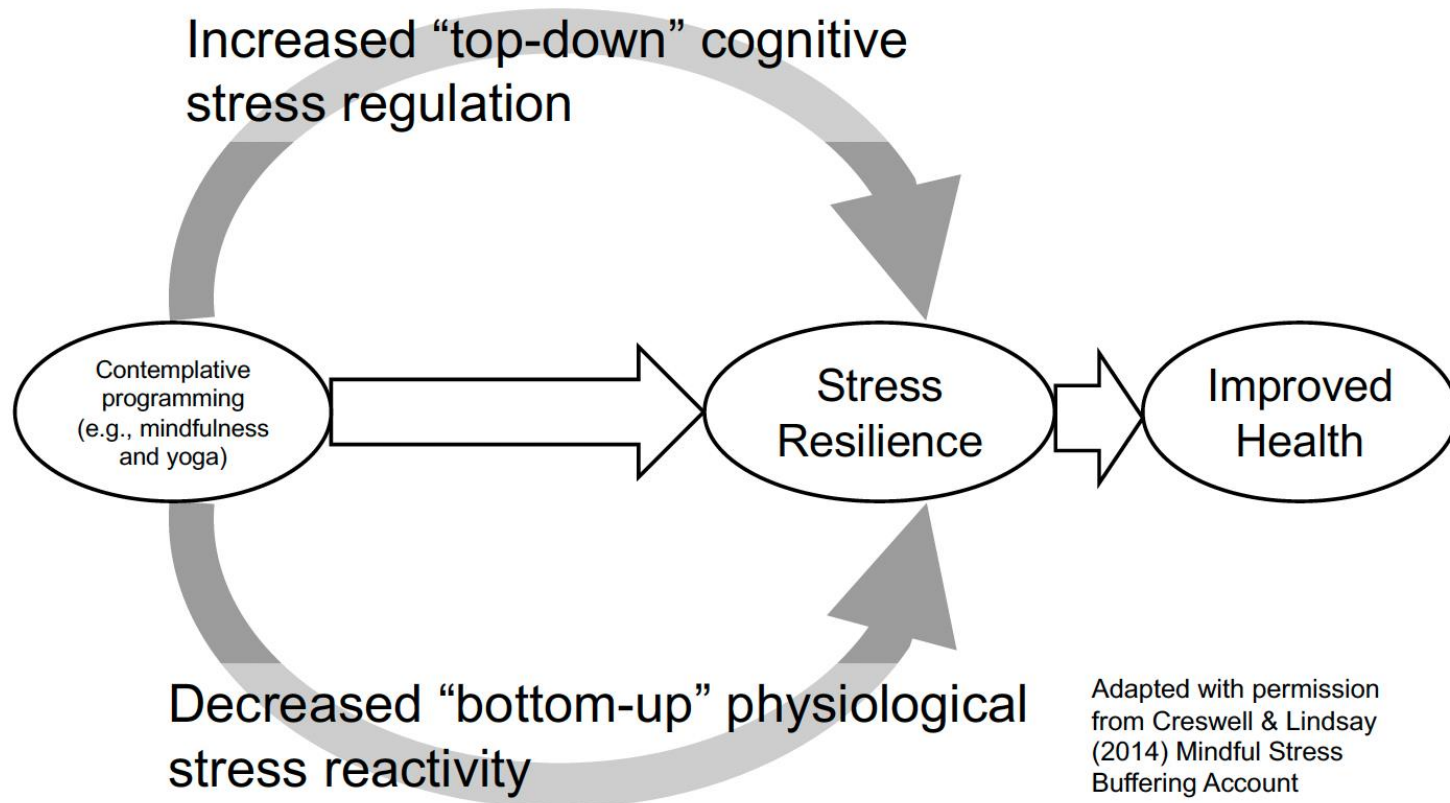


“bottom-up” reactivity pathway

# Theoretical foundations (Ash..., & Felver, 2025)

16

**Figure 1.** Stress buffering pathways of contemplative practices

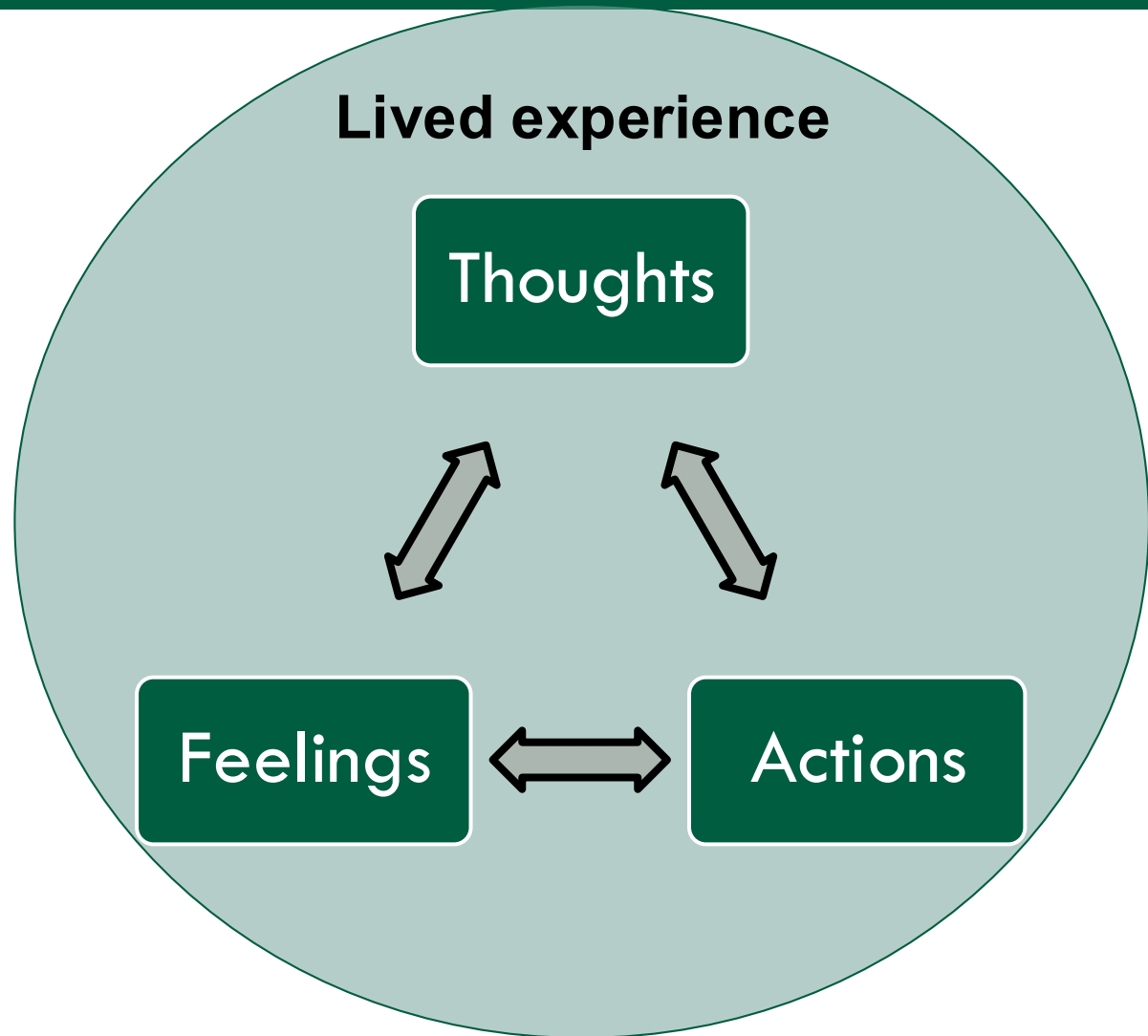


# Theoretical foundations

17

## Cognitive-behavioral therapy triangle

1. All thoughts, feelings, & actions are predictable
2. Feelings are never bad/wrong/inappropriate
3. Thoughts are not facts



# Theoretical foundations

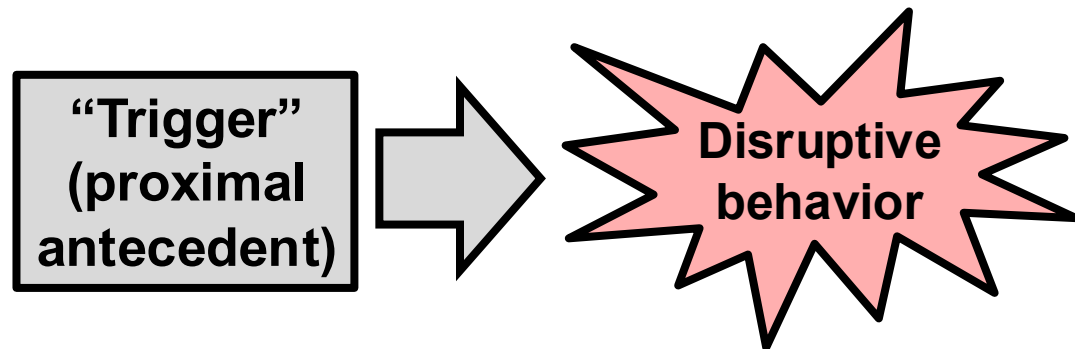
18

- **Behavioral theory** and Soles of the Feet
  - ▣ Antecedent-based strategy
  - ▣ Temporary reduction to aversive properties of antecedent (abolishing operation; mindfulness stress buffering)
  - ▣ Reinforcing competing behavioral response

# Theoretical foundations

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## Interrupting an escalating behavior sequence

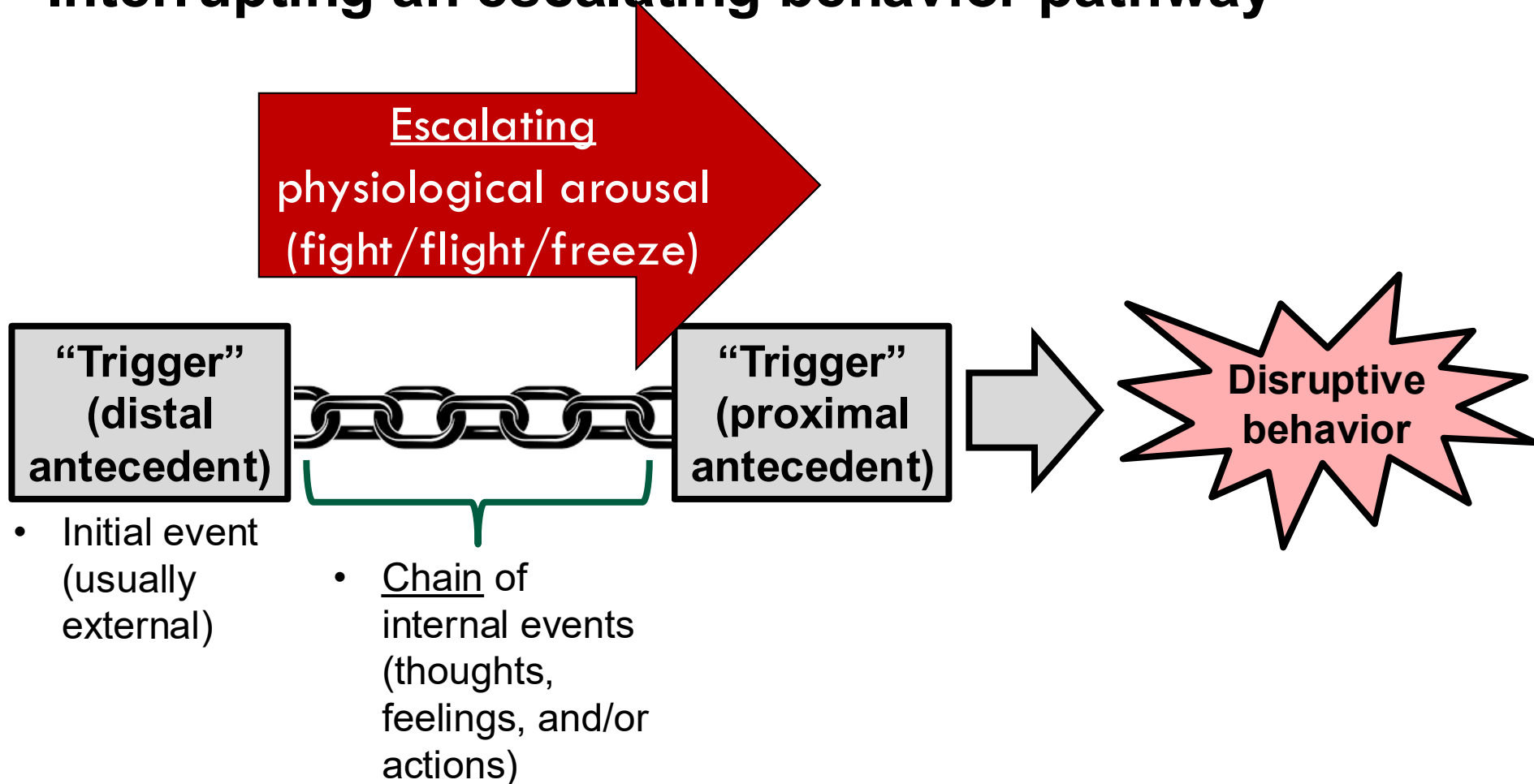


- External events
  - e.g., demand, verbal feedback, environmental cue
- Internal events
  - Thoughts, feelings, & actions

# Theoretical foundations

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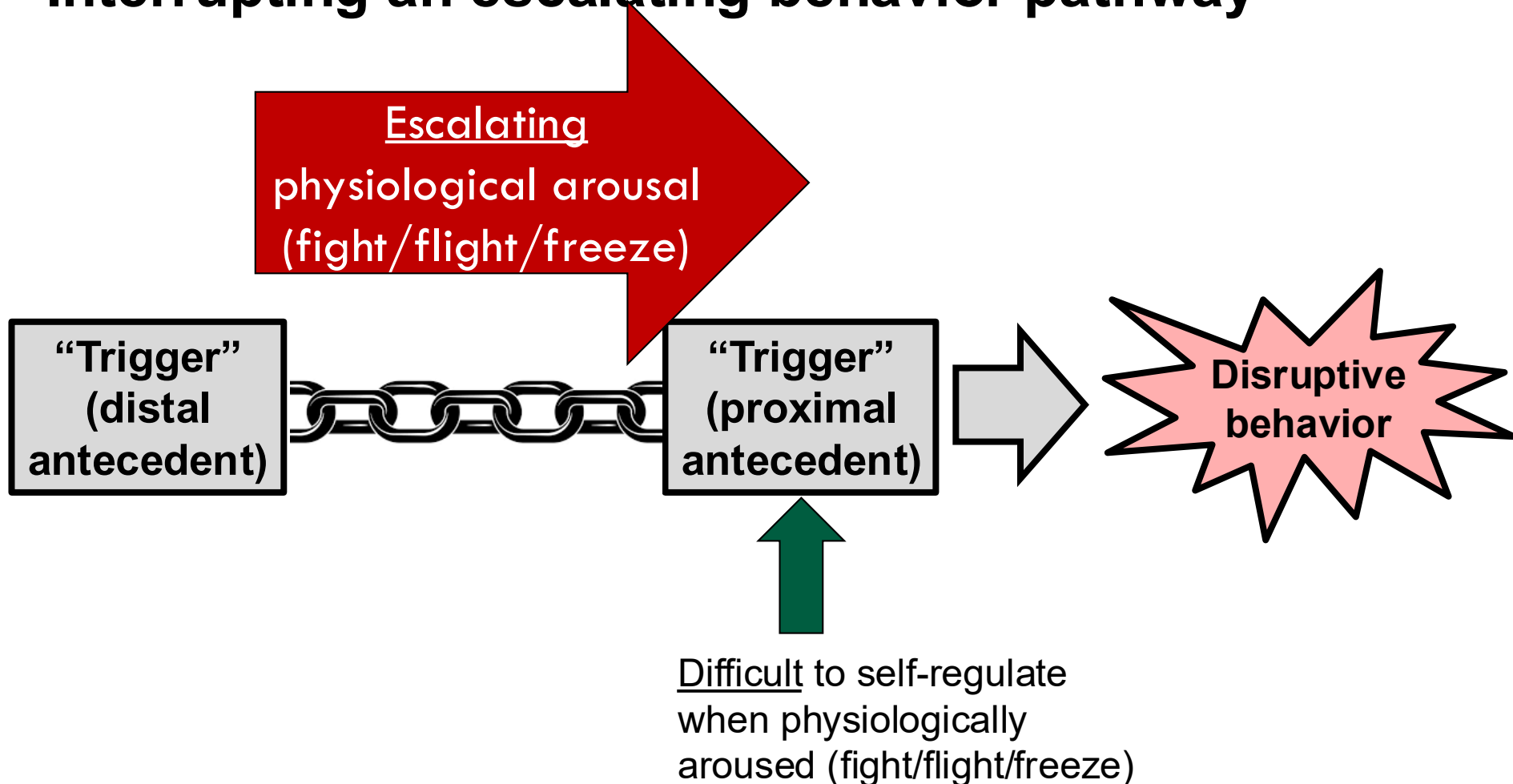
## Interrupting an escalating behavior pathway



# Theoretical foundations

21

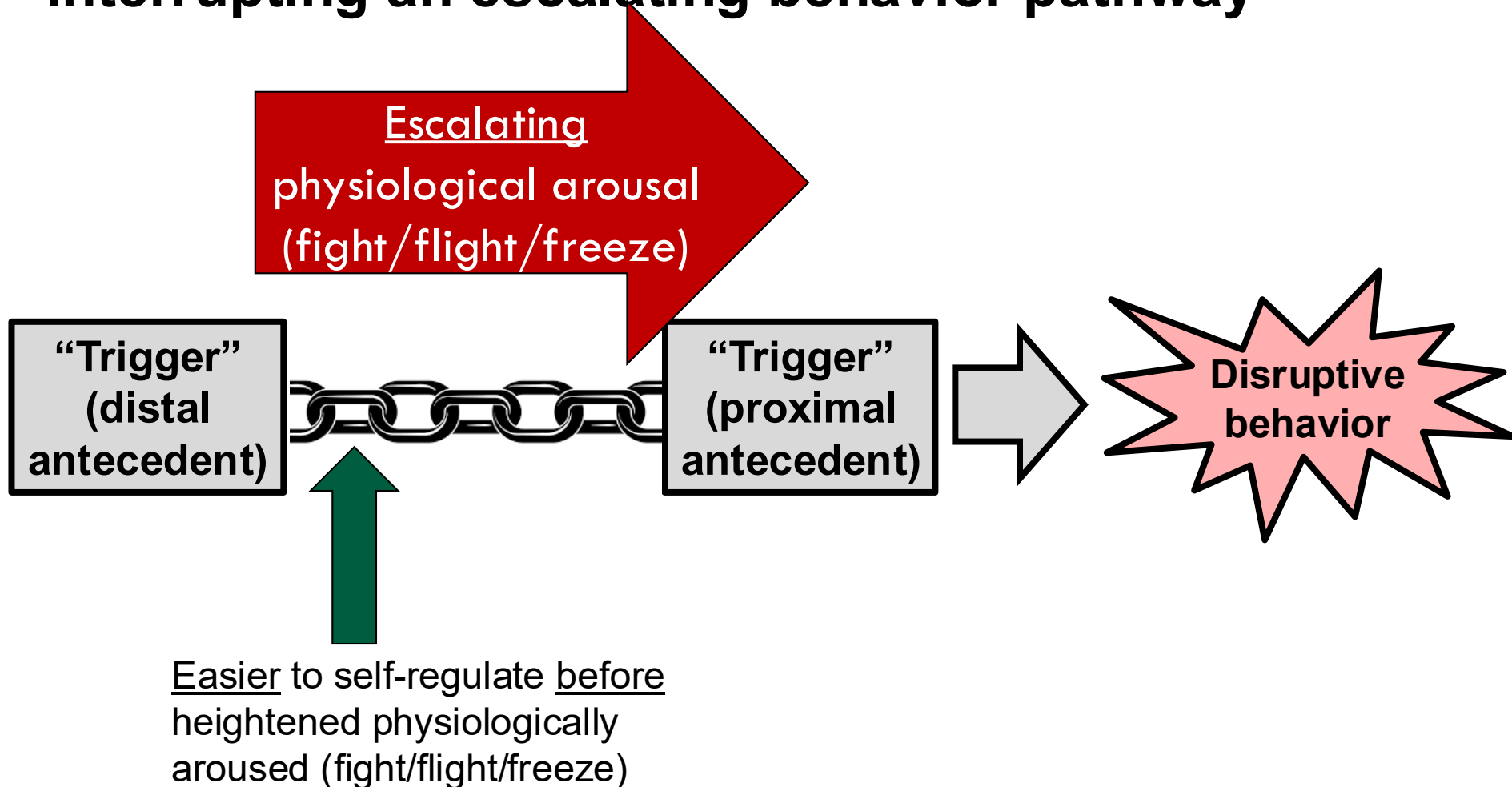
## Interrupting an escalating behavior pathway



# Theoretical foundations

22

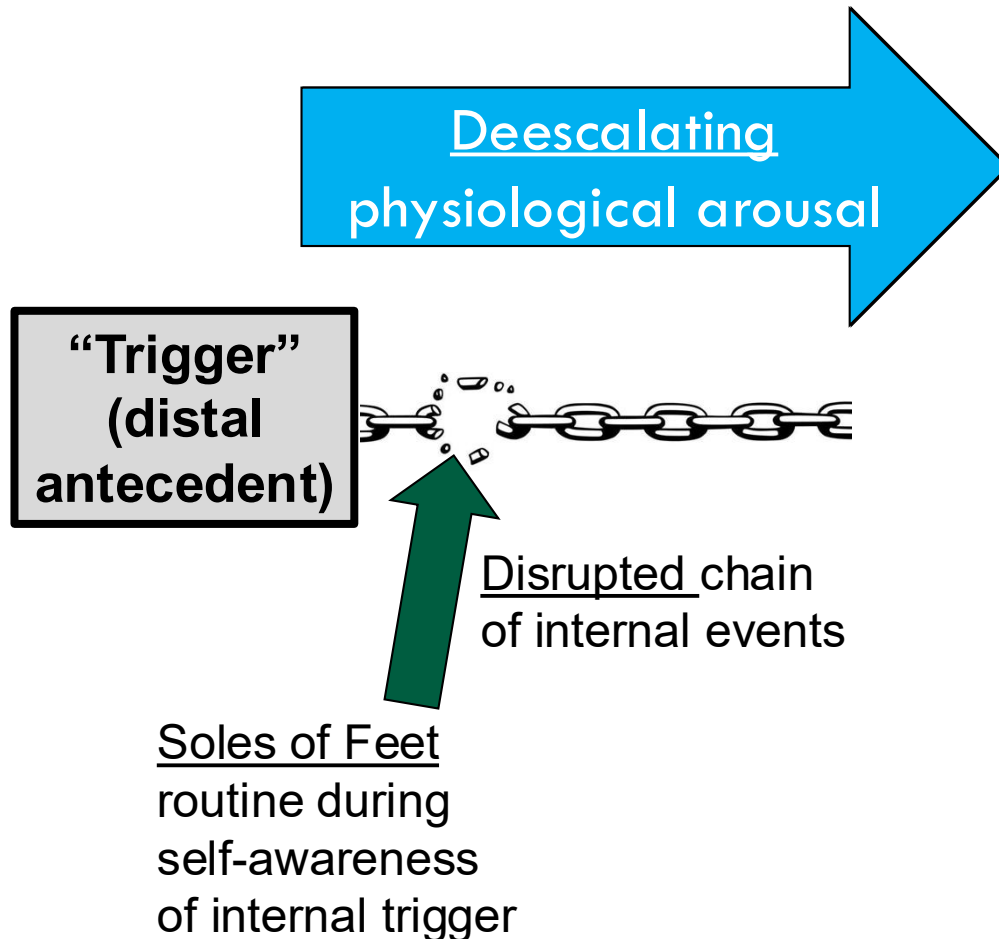
## Interrupting an escalating behavior pathway



# Theoretical foundations

23

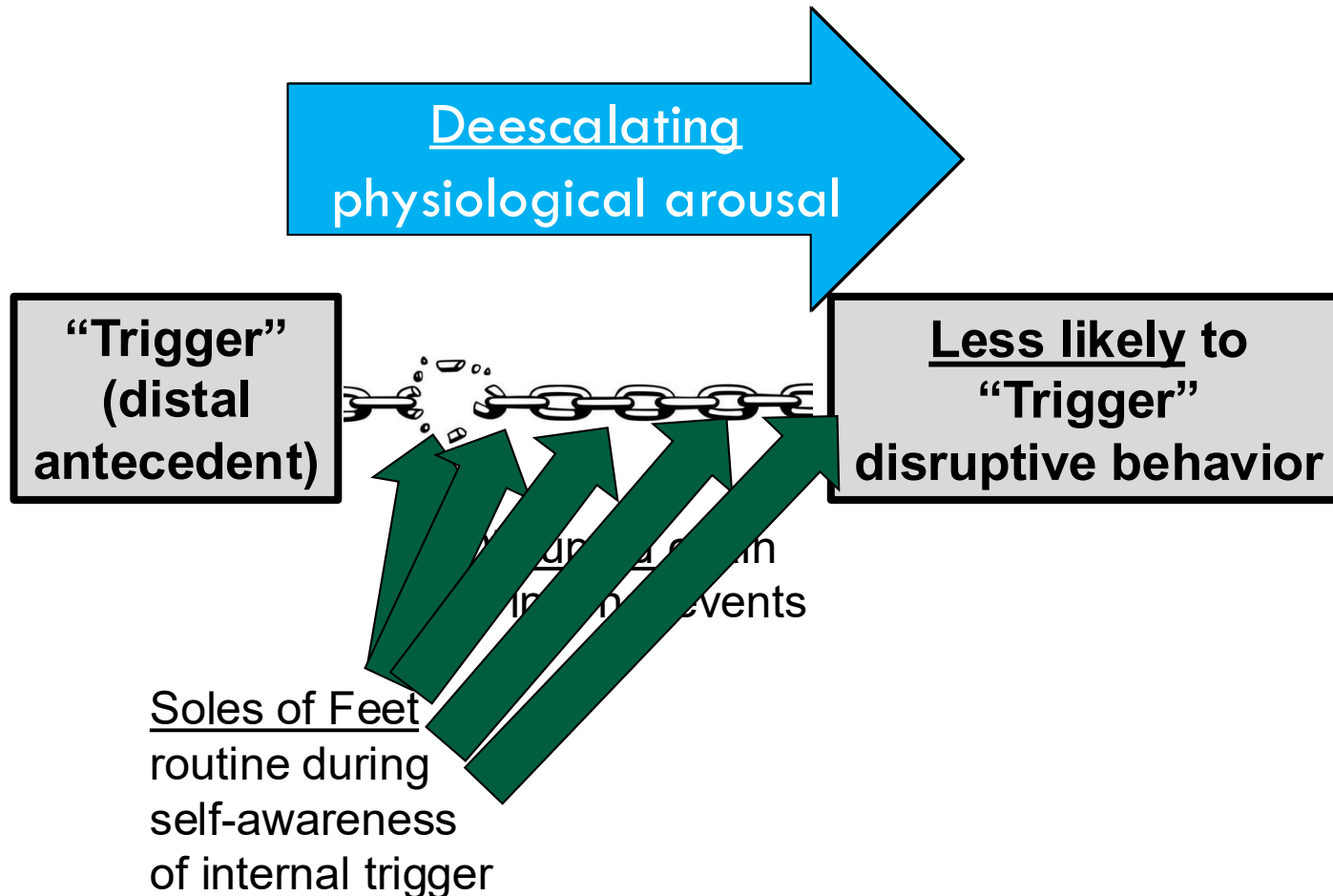
## Interrupting an escalating behavior pathway



# Theoretical foundations

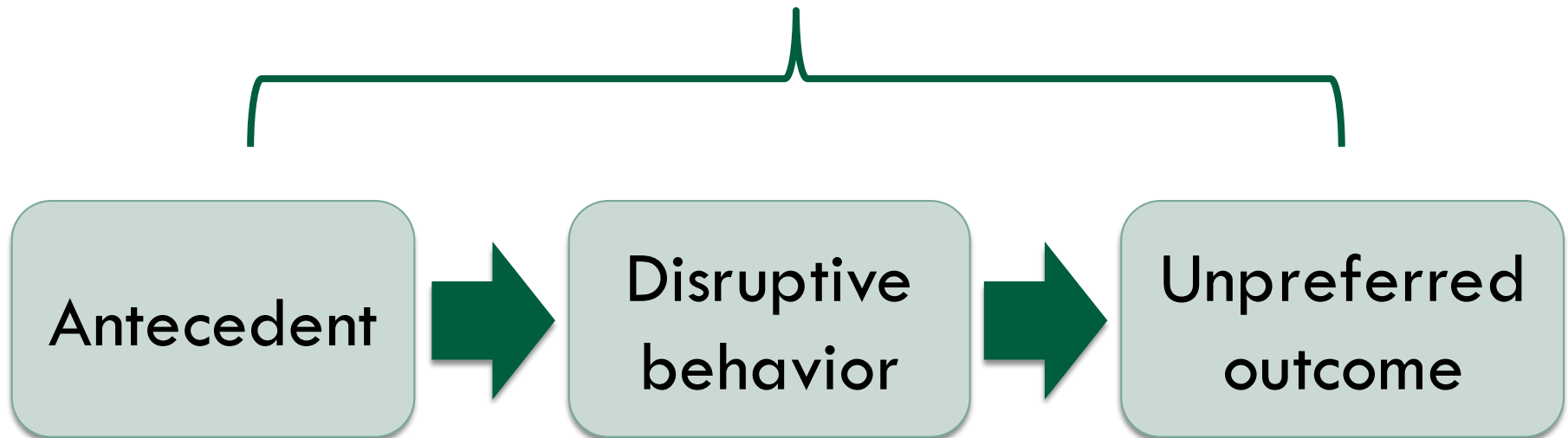
24

## Interrupting an escalating behavior pathway



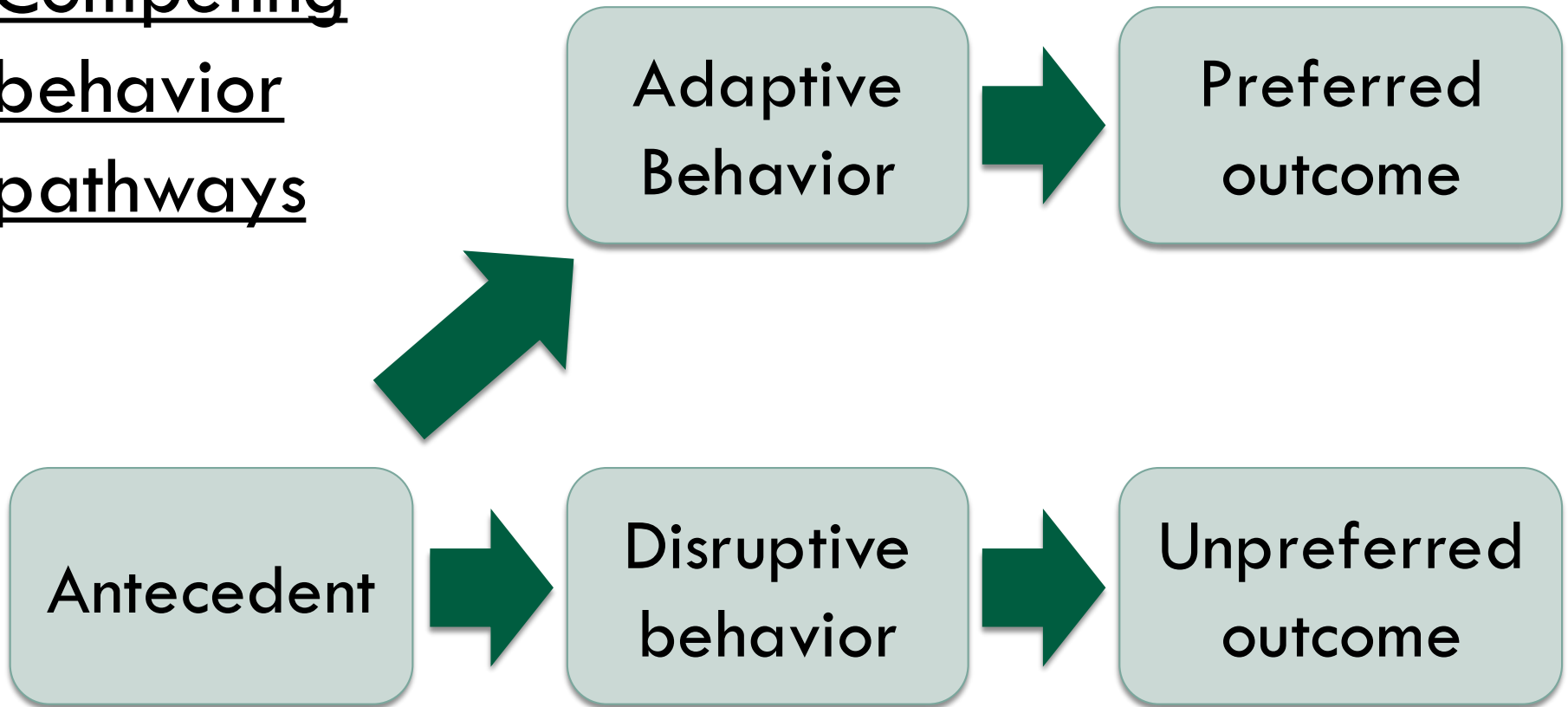
# Theoretical foundations

Behavior pathway is functional, but also disempowering, creates negative self-concept, and leads to poor outcomes

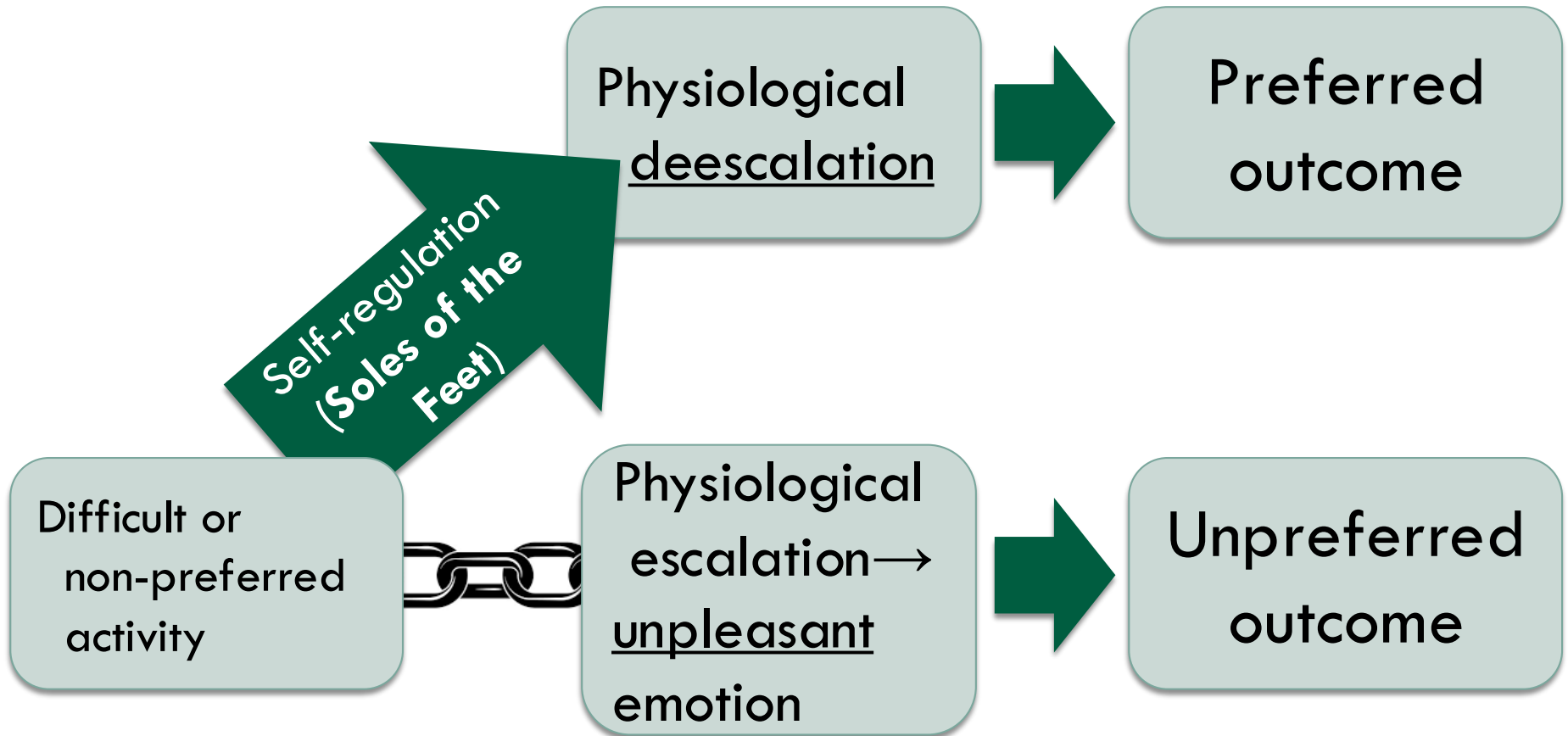


# Theoretical foundations

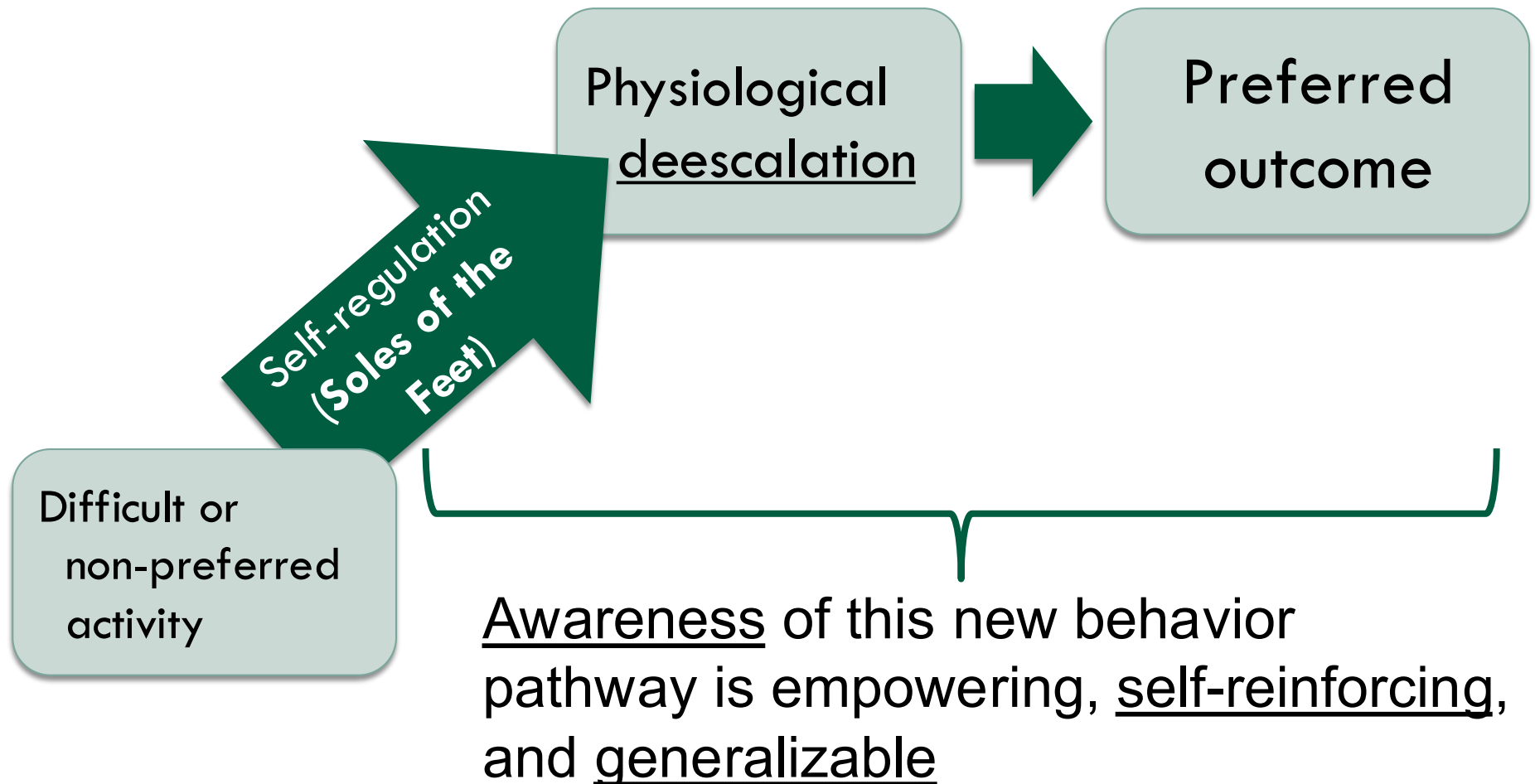
Competing  
behavior  
pathways



# Theoretical foundations



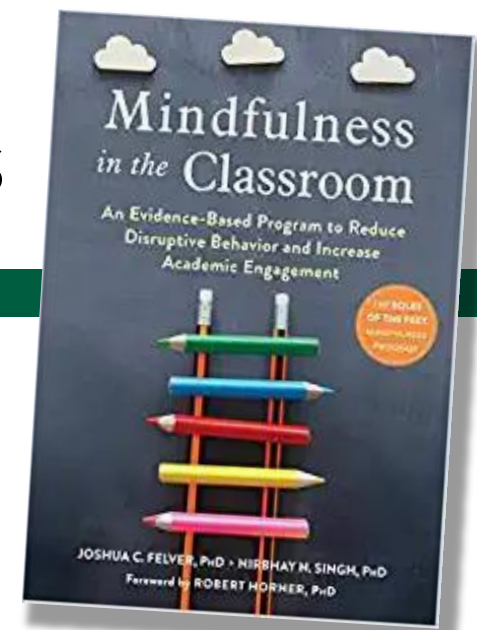
# Theoretical foundations



# Applied research outcomes

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- Initial development history
- Iterative refinement via single-case research design (SCRD)
  - Experimental, individual serves as control
  - Repeated measurement over time
  - Compares phases (before & after intervention)



(Felver & Singh; 2020)  
New Harbinger Publications

# Applied research outcomes

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- Objective repeated data collection
  - direct observation
  - 3<sup>rd</sup> party recording of behaviors

## Definitions (Dart et al., 2016)

**On-task:** The student's head and body oriented toward the target task while actively attending to assigned material, **OR** the student's head and body oriented toward the target task while passively attending to assigned classroom and included behaviors such as listening to a lecture, reading assigned material silently, and looking at the teacher during instruction.

**Off-task:** Defined as either motor activity not directly associated with an assigned academic task (e.g., getting out of seat to walk around the room), verbalizations not related to an assigned academic task (e.g., making noises during silent reading or talking to another student during a quiz), or **passively** not attending to an assigned academic task for **at least three consecutive seconds** within a given 15-second interval (e.g., staring out the window or watching other peers during a silent reading activity).

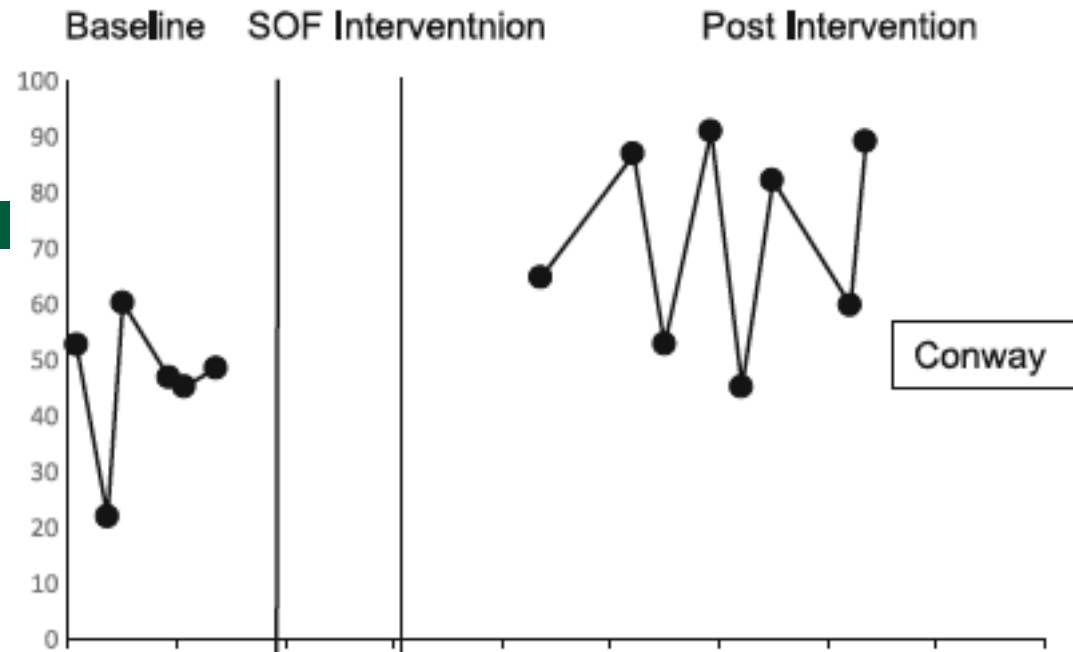
Obs Period	1	2	3	4	5	6
On-task						
Off-task						

Obs Period	7	8	9	10	11	12
On-task						
Off-task						

# Applied research outcomes

31

- **Setting:** Public school
- **Population:** Children (age 10-12) with disabilities (EBD & OHI)
- **Providers:** Graduate students (8 hours training)



**Table 2** Average percentage of academically engaged behavior across observations

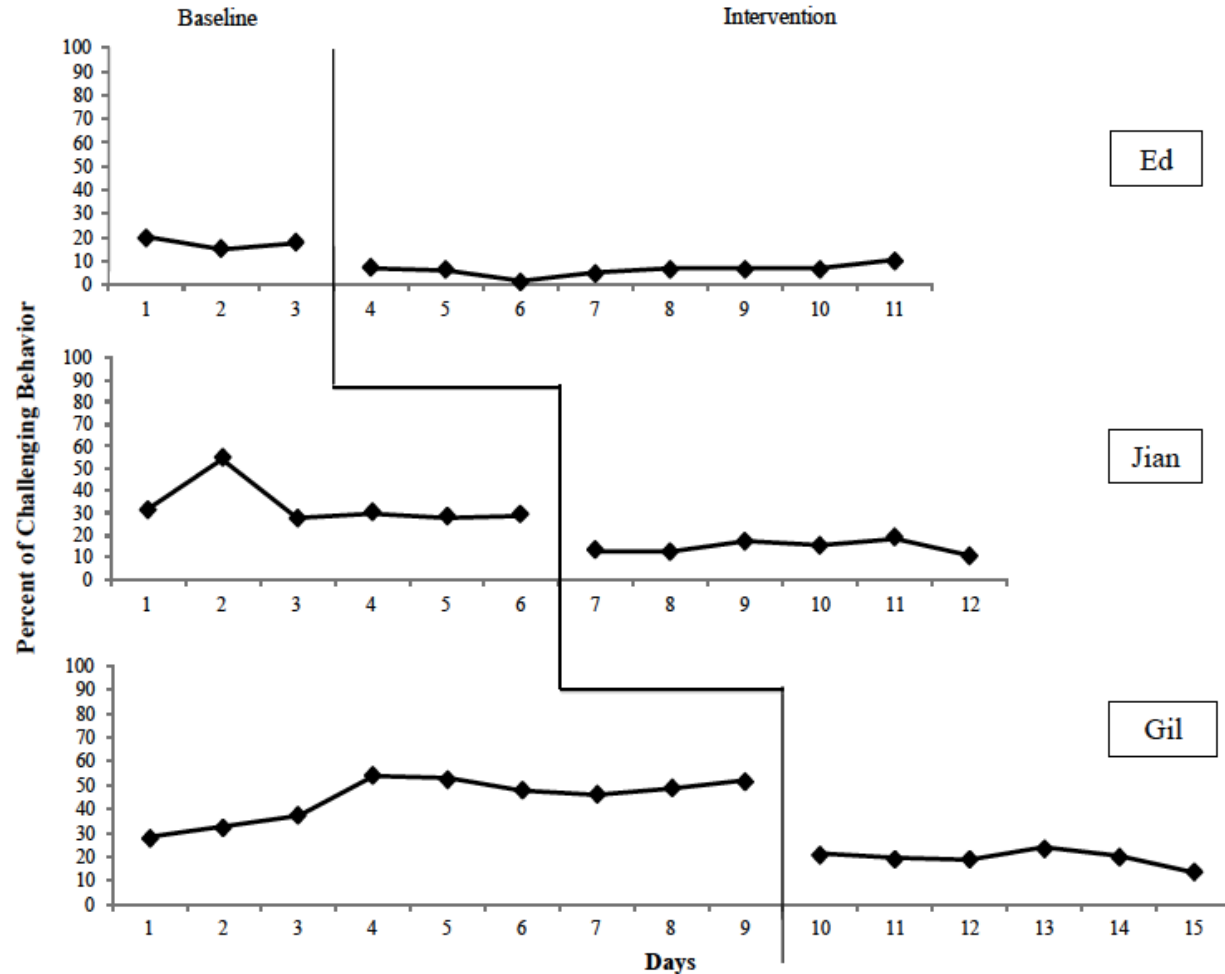
Student	Study phase		NAP
	Baseline	Post intervention	
Conway	45.7	71.2	87%
Cobalt	58.2	79.0	81%
Ash	27.2	71.6	100%
Ewan	59.4	83.5	92%

NAP denotes non-overlap of all pairs (NAP) effect size statistic between baseline and post intervention phases

# Applied research outcomes

32

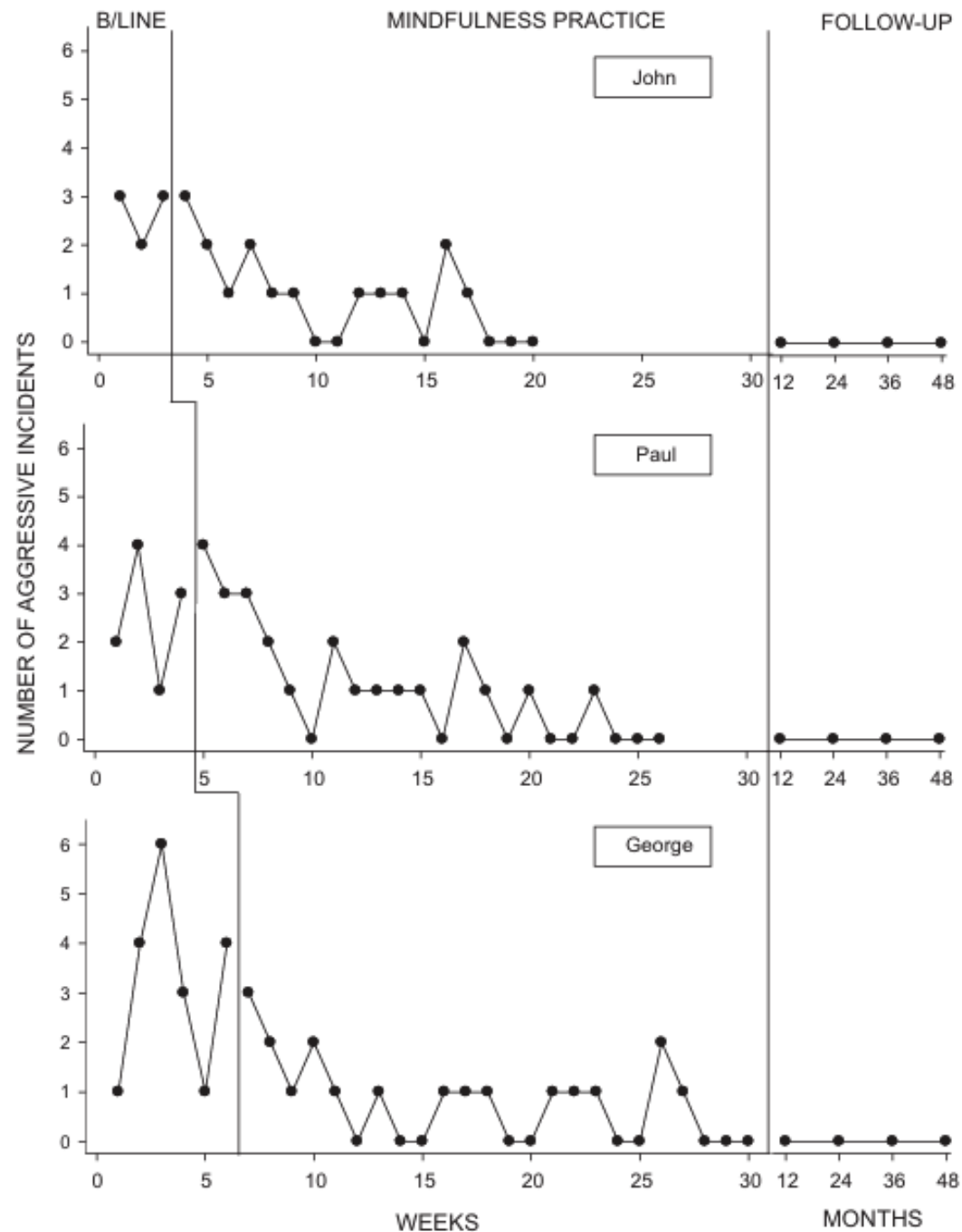
- **Setting:** Private school
- **Population:** Autistic children or children w/ autism (age 9-10)
- **Providers:** Mental health counselor (8 hours training)



# Applied research outcomes

33

- **Setting:** Home
- Population:** Autistic adolescents (age 14-17) w/ physical aggression in community
- Providers:** Mothers practicing with sons 2x/day



# Applied research outcomes

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□ **Setting:** School

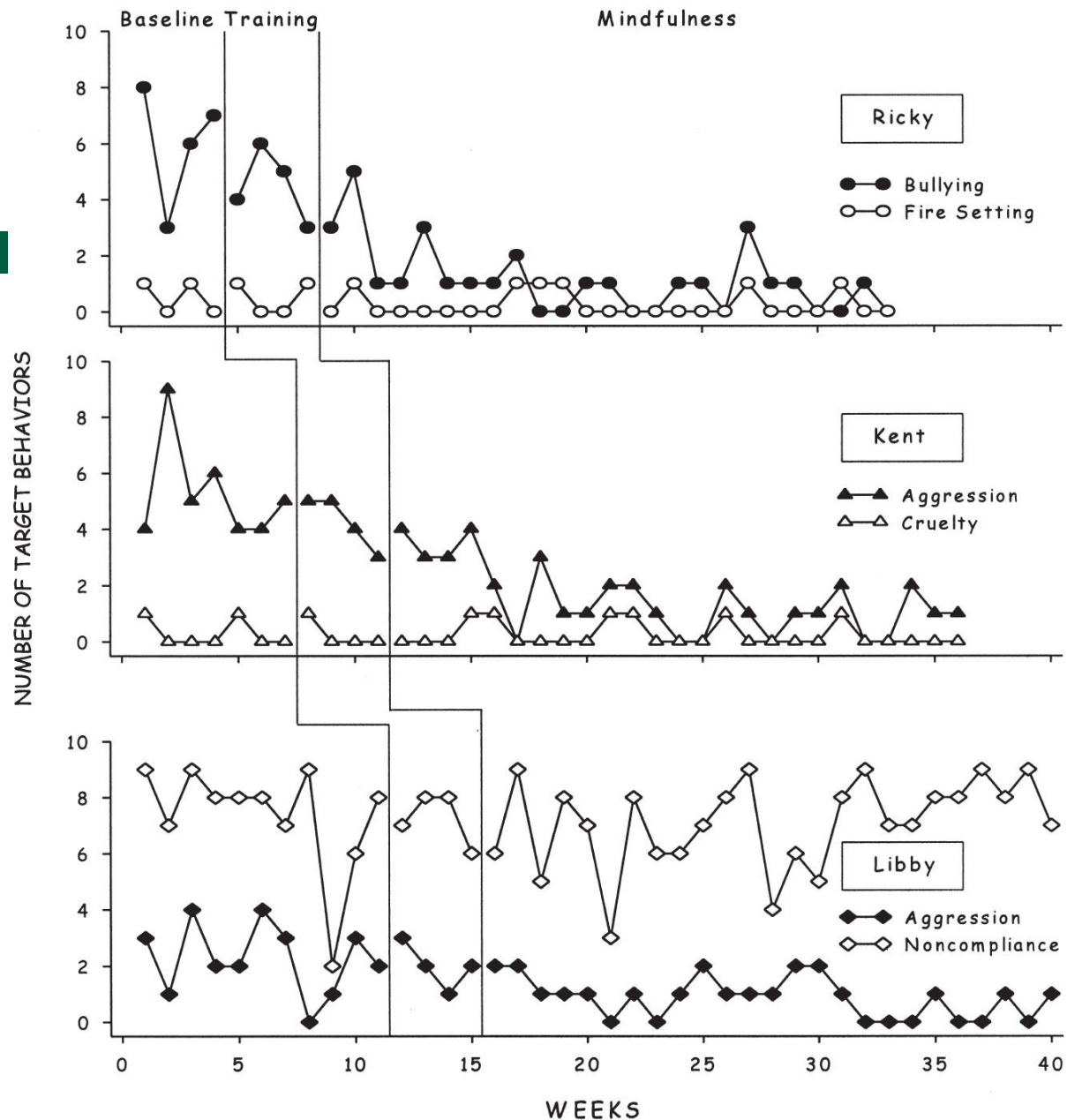
**Population:**

Adolescents  
(age 13-14)

with Conduct  
Disorder

□ **Providers:**

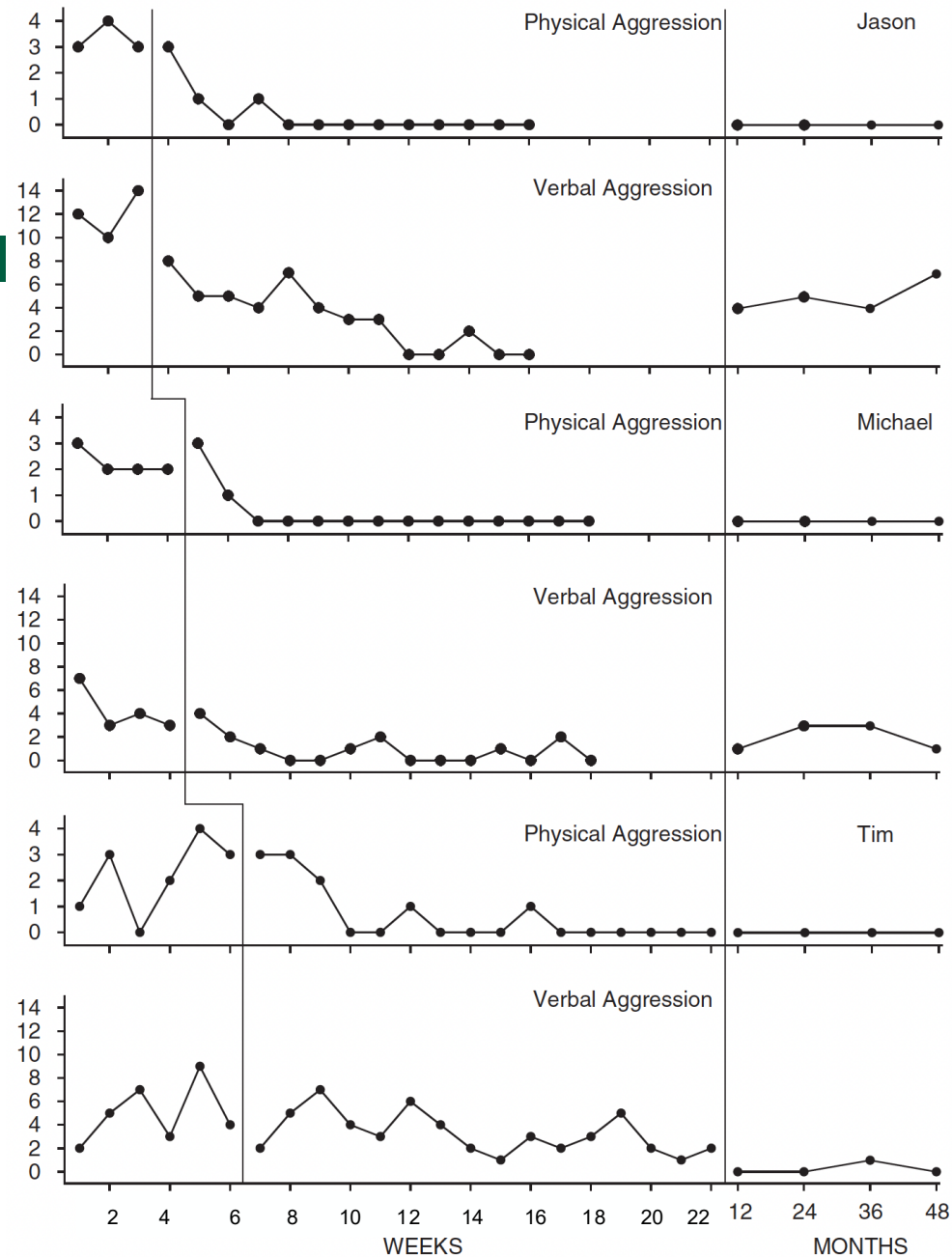
Outpatient  
therapist



# Applied research outcomes

36

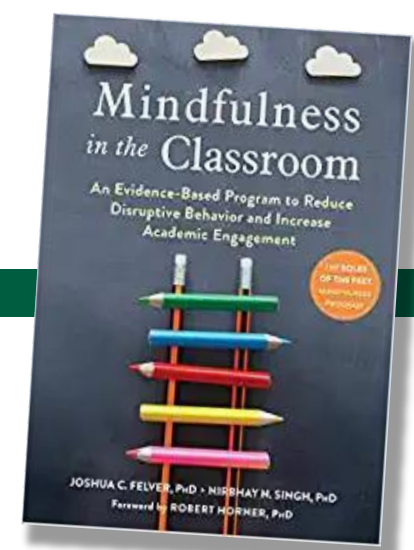
- **Setting:** Supported housing
- **Population:** Adults (age 27-43) with dual diagnosis (ID & Serious Mental Illness)
- **Providers:** Outpatient therapist



# Soles of the Feet

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- Meta-analytic synthesis of **15 SCRD studies**
- Aggregate **large effect size** ( $\text{Tau-U} = 0.87$ )
- Robust protocol (moderator analysis, all n.s.)
  - Participant age
  - Participant with, or without, intellectual disability
  - Whether person delivering had experience with MBP prior to SOF training
  - Deviations from five 30-minute sessions



(Felver & Singh; 2020)  
New Harbinger Publications

## Evidence-based practice for disruptive behavior

# Break and Q&A

# Soles of the Feet

39

- Usually five 30-minute sessions
- **Session 1:** Mindful breathing & SOF routine
- **Session 2:** practicing SOF with pleasant feeling
- **Session 3:** practicing SOF with unpleasant feeling
- **Session 4:** practicing SOF with triggers to unpleasant feeling
- **Session 5:** Generalization programming
- **Demonstrations** are challenge by choice

# Soles of the Feet – Session 1

40

- Introduction to curriculum
- Mindful breathing
  - ▣ Breathing ~~deep~~ low and slow
  - ▣ Demonstration...

# Soles of the Feet – Session 1

41

- Introduction to curriculum
- Mindful breathing
- **Learning about the foot**

# Knowing Your Feet Worksheet

Directions: Use the word bank to fill in the blank spaces.

## Word Bank

*AnkleArch*

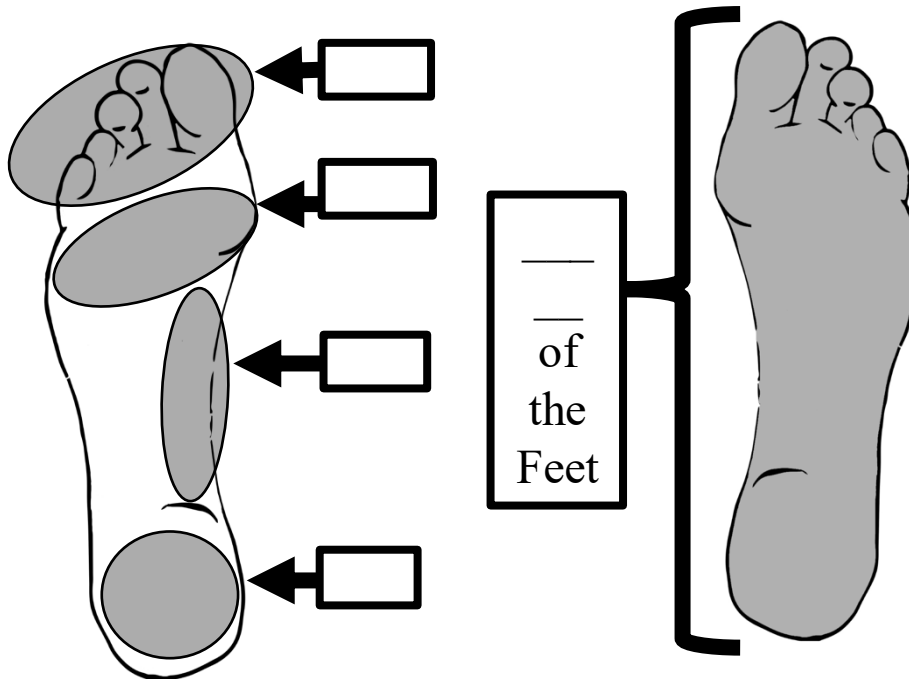
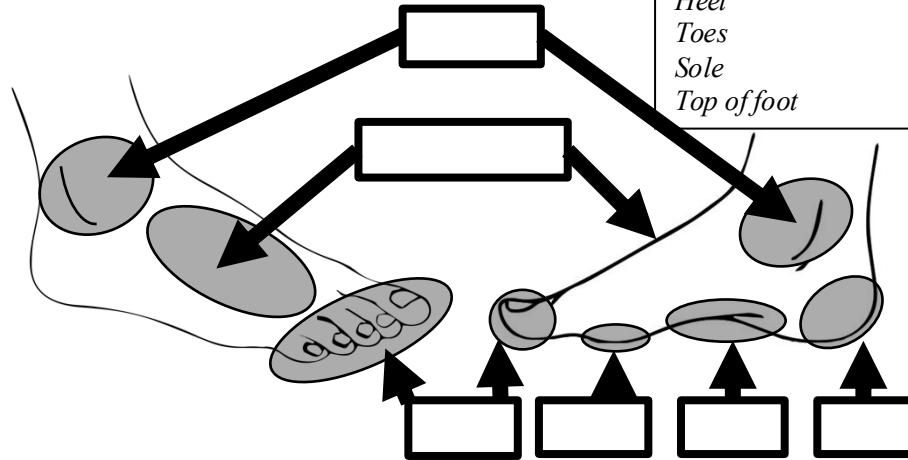
*Ball*

*Heel*

*Toes*

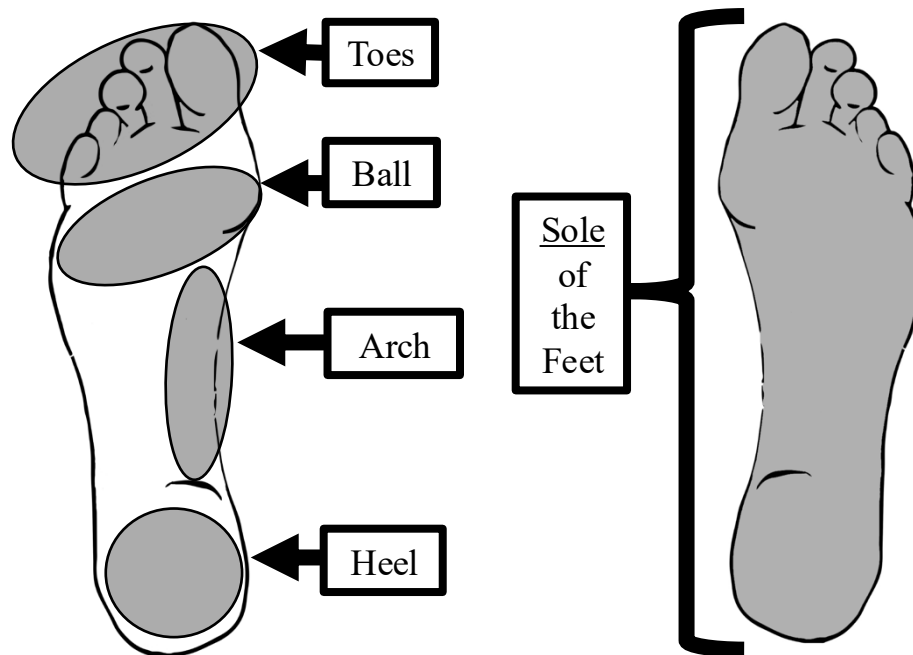
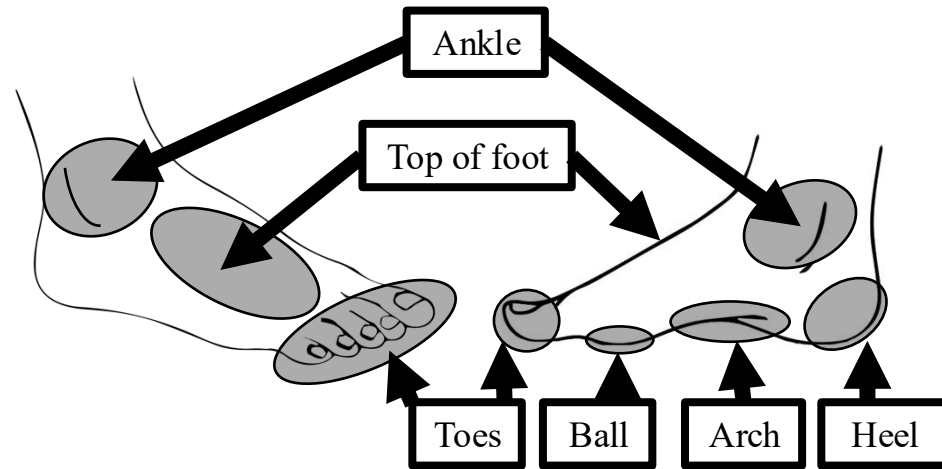
*Sole*

*Top of foot*



# Knowing Your Feet Handout

**Directions:** Look at the shaded areas to learn about the different parts of your feet. The entire bottom of your feet is called the sole of the feet.



# Soles of the Feet – Session 1

44

- Introduction to curriculum
- Mindful breathing
- Learning about the foot
- **Mindful awareness of somatic experience of feet**
  - ▣ **Demonstration...**

# Soles of the Feet – Session 1

45

- Introduction to curriculum
- Mindful breathing
- Learning about the foot
- Mindful awareness of somatic experience of feet
- **Practicing the full Soles of the Feet routine**
  - ▣ **Demonstration...**

# Soles of the Feet – Session 1

46

- Introduction to curriculum
- Mindful breathing
- Learning about the foot
- Mindful awareness of somatic experience of feet
- Practicing the full Soles of the Feet routine
- **Between session practice**
  - **Daily**
  - **Supported with handouts and prompts**

# Soles of the Feet – Session 2

47

- **Review home practice**
  - ▣ **Check for understanding**
  - ▣ **Troubleshoot practice routine**

# Soles of the Feet – Session 2

48

- Review home practice
- **Psychoeducation – pleasant feeling (happiness)**
- **Identifying a recent happy experience**
  - ▣ **Preparing for *in vivo* “experiment”**

# Appendix 1E

Basics of the event (What was happening generally? Where did this happen? When?)

What happened that made the student feel a strong emotion?

Persons attending (Who was there at the event? What did they say?)

What was the moment they remember feeling the most?

Sight (What do they remember seeing? What clothes were people wearing?)

Smells (What smells do they remember?)

Sounds (What sounds do they remember? Talking, laughing, yelling? What did people say?)

Touch (What was the weather like? Hot or cold temperature?)

Taste (If food was involved, what did they eat?)

Mind (Do they remember any specific thoughts? Any feelings or emotions?)

# Soles of the Feet – Session 2

50

- Review home practice
- Psychoeducation – pleasant feeling (happiness)
- Identifying a recent happy experience
- **Applying Soles of the Feet to pleasant feeling**
  - ▣ In vivo exposure and practice
  - ▣ **Demonstration...**

# Soles of the Feet – Session 2

51

- Review home practice
- Psychoeducation – pleasant feeling (happiness)
- Identifying a recent happy experience
- Applying Soles of the Feet to pleasant feeling
- **Post-practice discussion**
  - ▣ **Socratic questioning to elicit insight into activity and ability self-regulate while experiencing strong emotions**

# Soles of the Feet – Session 2

52

- Review home practice
- Psychoeducation – pleasant feeling (happiness)
- Identifying a recent happy experience
- Applying Soles of the Feet to pleasant feeling
- Post-practice discussion
- **Between session practice**
  - **Scaffolded**

# Soles of the Feet – Session 3

53

- Review home practice
- **Psychoeducation – unpleasant feeling (anger)**
  - ▣ **Differentiate feeling (anger) from behavior (aggression)**
- Identifying a recent angry experience
- Applying Soles of the Feet to unpleasant feeling
- Post-practice discussion
- Between session practice

# Soles of the Feet – Session 4

54

- Review home practice
- **Define “trigger” (antecedent)**
- **Identify triggers to unpleasant feeling**
- Identifying a recent angry experience
- Applying Soles of the Feet to **triggers to unpleasant feeling**
- Post-practice discussion
- Between session practice

# Soles of the Feet – Session 5

55

- Review home practice
- Curriculum review
- Making plan for future practice and application
  - ▣ Programming for fluency and generalization

# Appendix 1G

## My Biggest Triggers

- (1)
- (2)
- (3)

## Situations where SoF can be useful

### In school

*When?*

*Where?*

*With Whom?*

### At home

*When?*

*Where?*

*With Whom?*

### Other

*When?*

*Where?*

*With Whom?*

These are the best times for me to use Soles of the Feet:

	<b>Trigger (Internal and External)</b>	<b>Situation (When? Where? With whom?)</b>
<b>1</b>		
<b>2</b>		
<b>3</b>		

# Soles of the Feet – Session 5

57

- Review home practice
- Curriculum review
- Making plan for future practice and application
- Check for mastery
- Closure/termination

# Soles of the Feet – Booster Session

58

- Revisit all the core content of sessions 1-5
- Redistribute materials
- Check for understanding
- Troubleshoot home practice, fluency, and generalization

# Further training & next steps

59

- Start a regular mindfulness practice
  - ▣ Search “UCSD mindfulness” →
  - ▣ University of California Center for Mindfulness →
  - ▣ Guided Audio & Video
- Search for local introductory course in your community
  - ▣ Buddhist center or “sangha”
  - ▣ Secular 8-week “Mindfulness-Based Stress Reduction”

# Further training & next steps

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- Keep in mind best practices for your population
  - Mindfulness-based programming for stress
  - Specific MBP for specific populations
  - Soles of Feet is an evidence-based intervention for disruptive behavior
- Mindfulness-based programming is not a panacea – consider best practice for your context

# Further training & next steps

61

- What makes for a knowledgeable and skilled mindfulness instructor?
- We surveyed experts...

# The Delphi Method

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- Systematic derivation of experts' consensus opinion
  
- **Key features:**
  - Anonymous expert “panelists”
  - Iterative asynchronous survey “rounds”
  - Consideration of aggregate peer responses

# MBP in Youth Delphi study

63

- Round 1: Expert scientists asked research questions...
  - ▣ *Components of MBP for youth?*
  - ▣ *Competencies needed of youth MBP instructor?*
  - ▣ *Ideal youth MBP session structure?*

**QUAL. ANALYSIS & QUANT. SUMMARIZATION**
- Round 2: Expert scientists & instructors
  - ▣ Names, definitions, % endorsement, and averages
  - ▣ Consider both prior response and aggregate peer responses

**QUANT. SUMMARIZATION**
- Round 3: repeated Round 2 process

**FINAL SUMMARIZATION, CONSENSUS = > 75% AGREEMENT**

# Core instructor competencies

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## Embodying...

- ▣ Mindfulness (generally)
- ▣ Acceptance
- ▣ Non-judgment
- ▣ Empathy/perspective taking
- ▣ Compassion

## Mindfulness practice

- ▣ Personal training in practice
- ▣ Sustained formal practice  
(25 min/day for 20 months)

## Non-specific interpersonal skills

- ▣ Building connection with youth
- ▣ Creating safe accepting group
- ▣ Clear/accessible communication
- ▣ Flexible & adaptable instruction

# Further training & next steps

65

- What makes for a knowledgeable and skilled mindfulness instructor?

***Practice what you know!***

- Develop a regular mindfulness practice
  - Embodiment is essential
- Become fluent with Soles of the Feet
  - Practice using it
  - Practice teaching it

# Further training & next steps

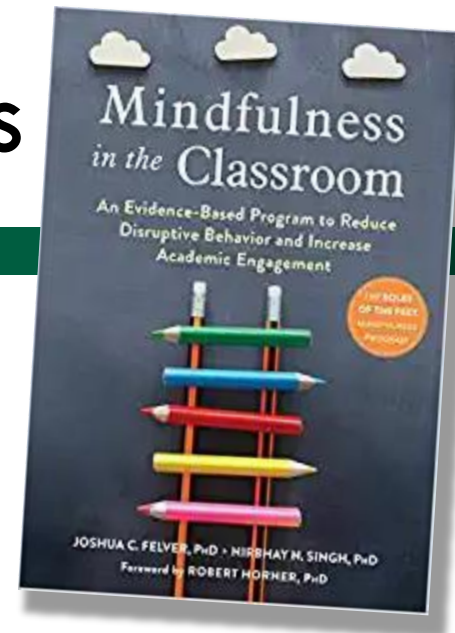
66

- Mindfulness and trauma
  - Risk factors for mindfulness practice for individuals with trauma, severe physiological anxiety (panic attacks), and recent recovery from substance abuse
  - Recommend trauma-informed care in all applied work

# Further training & next steps

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- Book has the entire protocol
  - ▣ Why we published this...
  - ▣ Accessible & detailed
  - ▣ Recommend reading Chapter 14 (FAQs) before teaching the first time



(Felver & Singh; 2020)  
New Harbinger Publications

# Thank you!

Questions and  
discussion...

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OREGON



**SPRINGFIELD**  
PUBLIC SCHOOLS

Every Student, Every Day. ● ● ● ● ● ● ● ● ● ●



Robert Wood Johnson  
Foundation

# Core program components

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## Expected

- ❑ Self-awareness
- ❑ Non-judging
- ❑ Focused attention
- ❑ Orienting present moment
- ❑ Acceptance

## Unexpected

- ❑ *Compassion*
- ❑ *Somatic awareness*
- ❑ *Non-reacting*
- ❑ *Decentering*

## Instructor sub-group only

- ❑ Skillful responding
- ❑ Loving-kindness (metta)

# Ideal session structure

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<b>Developmental period</b>	<b>Total length of individual class</b>	<b>Mindfulness practice</b>	<b>Didactic instruction</b>	<b>Discussion or Q&amp;A</b>
Early Childhood	<b>20 min</b>	<i>12 min</i>	<i>4 min</i>	<i>5 min</i>
Middle Childhood	<b>35 min</b>	<i>19 min</i>	<i>7 min</i>	<i>8 min</i>
Adolescence	<b>50 min</b>	<i>25 min</i>	<i>12 min</i>	<i>13 min</i>

### Expert scientist identification

1,751 publications initially identified and screened  
432 publications identified clinical trials of mindfulness-based programs with youth  
1,489 authors contributing authors identified  
36 scientists recruited (30 purposive, 6 snowball)

### Round 1 Delphi survey

19 scientists consented to study  
111 responses qualitatively analyzed  
33 core competencies identified

#### Scientist ( $n=19$ ) endorsement of core competencies as essential

**0 Competencies**  
achieved consensus  
( $\geq 75\%$ )

**0 Competencies**  
marginal consensus  
(50 – 74%)

**33 Competencies**  
without consensus  
( $\leq 49\%$ )

#### Expert instructor identification

63 instructors recruited  
(41 snowball via scientists, 22 snowball via instructors)  
21 instructors consented to study

### Round 2 Delphi survey

#### Scientist ( $n=17$ ) endorsement of core competencies as essential (2 scientists did not complete survey)

**6 Competencies**  
achieved consensus  
( $\geq 75\%$ )

**9 Competencies**  
marginal consensus  
(50 – 74%)

**18 Competencies**  
without consensus  
( $\leq 49\%$ )

#### Instructor ( $n=21$ ) endorsement of core competencies as essential

**11 Competencies**  
achieved consensus  
( $\geq 75\%$ )

**10 Competencies**  
marginal consensus  
(50 – 74%)

**12 Competencies**  
without consensus  
( $\leq 49\%$ )

### Round 3 Delphi survey

#### Scientist ( $n=16$ ) endorsement of core competencies as essential (1 scientist did not complete survey)

**9 Competencies**  
achieved consensus  
( $\geq 75\%$ )

**7 Competencies**  
marginal consensus  
(50 – 74%)

**17 Competencies**  
without consensus  
( $\leq 49\%$ )

#### Instructor ( $n=17$ ) endorsement of core competencies as essential (4 instructors did not complete survey)

**16 Competencies**  
achieved consensus  
( $\geq 75\%$ )

**3 Competencies**  
marginal consensus  
(50 – 74%)

**14 Competencies**  
without consensus  
( $\leq 49\%$ )

**Expert scientist and instructor ( $n=33$ ) consensus endorsement of 11 essential core instructor competencies of MBP for youth**  
( $\geq 75\%$  consensus endorsement in combined group)

**Table 1.** Demographic characteristics of participants across each Delphi Survey Round

Characteristic	Round 1	Round 2		Round 3	
	Scientists ( <i>n</i> =19)	Scientists ( <i>n</i> =17)	Instructors ( <i>n</i> =21)	Scientists ( <i>n</i> =16)	Instructors ( <i>n</i> =17)
<b>Race, <i>n</i> (%)</b>					
Asian	0 (0.0%)	0 (0.0%)	1 (4.8%)	0 (0.0%)	1 (5.9%)
Black or African American	0 (0.0%)	0 (0.0%)	1 (4.8%)	0 (0.0%)	1 (5.9%)
Native Hawaiian or Pacific Islander	1 (5.3%)	1 (5.8%)	0 (0.0%)	1 (6.3%)	0 (0.0%)
Other (Latino)	0 (0.0%)	0 (0.0%)	1 (4.8%)	0 (0.0%)	1 (5.9%)
Other (Israeli-Jew)	0 (0.0%)	0 (0.0%)	1 (4.8%)	0 (0.0%)	1 (5.9%)
White	18 (94.7%)	16 (94.1%)	17 (81.0%)	15 (93.8%)	13 (76.5%)
<b>Ethnicity, <i>n</i> (%)</b>					
Hispanic, Latino, or Spanish origin	1 (5.3%)	1 (5.8%)	1 (4.8%)	0 (0.0%)	1 (5.9%)
Non-Hispanic, Latino, or Spanish origin	18 (94.7%)	16 (94.1%)	20 (95.2%)	16 (100.0%)	16 (94.1%)
<b>Gender, <i>n</i> (%)</b>					
Women	13 (68.4%)	11 (64.7%)	14 (66.7%)	11 (68.8%)	10 (58.8%)
Men	6 (31.6%)	6 (35.2%)	7 (33.3%)	5 (31.3%)	7 (41.2%)
<b>Highest educational degree, <i>n</i> (%)</b>					
Doctorate (e.g., PhD, EdD)	19 (100.0%)	17 (100.0%)	7 (33.3%)	16 (100.0%)	5 (29.4%)
Professional (e.g., MD, DDS)	0 (0.0%)	0 (0%)	3 (14.3%)	0 (0.0%)	3 (17.6%)
Master's (e.g., MS, MSW)	0 (0.0%)	0 (0%)	7 (33.3%)	0 (0.0%)	6 (35.3%)
Bachelor's (e.g., BA, BS)	0 (0.0%)	0 (0%)	3 (14.3%)	0 (0.0%)	2 (11.8%)
Associates (e.g., AA, AS)	0 (0.0%)	0 (0%)	1 (4.8%)	0 (0.0%)	0 (5.9%)
Scopus <i>h</i> -index, median (IQR)	19 (11.0-23.0)	19 (10-23)	1 (0.0-6.0)	15.5 (9.0-23.0)	1 (0.0-6.0)
<b>Mindfulness/related contemplative discipline</b>					
Practice experience, <i>n</i> (%)	18 (94.7%)	16 (94.1%)	20 (95.2%)	15 (93.8%)	17 (100.0%)
Years of experience, median (IQR)	20 (11.3-30.0)	21 (13.8-31.3)	20 (12.8-29.8)	20 (12.5-30.0)	21.3 (16.5-31.0)
Research experience, <i>n</i> (%)	19 (100.0%)	17 (100.0%)	11 (52.4%)	16 (100.0%)	9 (52.9%)
Years of experience, median (IQR)	12 (10.0-15.0)	12 (10.0-15.0)	9 (9.0-15.0)	11 (10.0-15.8)	9 (9.0-18.0)
Instructional experience, <i>n</i> (%)	12 (63.2%)	11 (64.7)	21 (100.0%)	10 (62.5%)	16 (100.0%)
Years of experience, median (IQR)	11.5 (9.5-15.5)	13 (9.0-16.0)	14.0 (8.0-18.0)	11.5 (8.5-16.5)	15 (8.0-18.0)

**Table 2** Delphi Survey Round 1 results detailing identified and defined categorical codes of potential core program components (CPCs) of mindfulness-based programming/intervention (MBP) for youth

Categorical code	Definition
*Acceptance	Embracing and being open to internal/external experience without need to change; allowing things to be as they are; non-striving; non-attachment; non-avoidance; non-grasping; and “letting go” of wanting to change pleasant/unpleasant/neutral experience
Attentional control	Ability to move attention between internal/external experiences
Commitment	Action toward goals, intentions, values, principles, and/or ethics. This includes commitment to mindfulness practice and personal positive growth
*Compassion	Concern for, and interest in, the alleviation of suffering for self and others
Curiosity	Orientation to experience as a novel and interesting event; “beginner’s mind.”
*Decentering	Developing an experiential understanding that thoughts and feelings are transient events; that thoughts and feeling do not equal reality; that the self is not the “flow of thoughts.”
Effortful practice	Deliberate practice with effort/energy allocated to sustain practice
Equanimity	Balance, composure, and stability during times of distress or unpleasant experience
*Focused attention	Deliberate and sustained attention allocated to a targeted internal/external experience for a sustained period of time (e.g., one’s breathing, an object, sensation). Includes noticing when the attention moves off the target internal/external experience and returning attention to this target
Gratitude	Reflection on, and appreciation for, positivistic internal/external experience
†Loving-kindness	Friendly care, support, and well-wishes for the wellbeing of self and others
*Non-judging	Interpretation of internal/external experience without good/positive or bad/negative interpretation. This includes increasing awareness of judgments, and practicing non-judgmental perceptions of thoughts, feelings, and sensations
*Non-reacting	Ability to observe pleasant/unpleasant/neutral internal/external experiences without taking immediate action to alter the experience, allowing for greater space between stimulus and response
Open monitoring	Awareness of internal/external experience without anchoring attention on specific stimuli; application of “broad” (as opposed to “narrow”) attention to internal/external experiences
*Orienting to present moment	Moment-to-moment awareness of transient internal/external experience
Perspective taking	Ability to understand the separate thoughts, feelings, behaviors and emotional states of others, and the inter-relation between them. Includes empathy
*Self-awareness	Experiential understanding and awareness of thoughts, actions, and emotional states, and the interrelation between these internal/external experiences
Self-trust	Having confidence in one’s ability to meet/adapt to experience/challenges
†Skillful responding	Ability to respond to (typically unpleasant) internal/external experience with adaptive behavior. Includes (but not limited to): cognitive restructuring, relaxation exercises, deployment of coping strategies
*Somatic awareness	Awareness of bodily sensations and/or movement
Sympathetic joy	Reflection on, and appreciation for, positivistic internal/external experiences of others
Understanding interconnectedness	Insight into the interconnection between internal and external world, and that all stimuli are dependent on other stimuli to exist (e.g., nothing can exist in vacuum)

Categorical codes with an \* indicate consensus (i.e.,  $\geq 75\%$  endorsement) in combined sample of scientists and instructors (n = 33) at conclusion of Survey Round 3 as an identified CPC of MBP for youth. Categorical codes with a † indicate  $\geq 75\%$  endorsement for only the instructor group the conclusion of Survey Round 3

# MBP for youth competencies

**Table 3.** Delphi Survey Round 3 results detailing endorsement of categorical codes of potential instructor competencies of mindfulness-based programming/intervention (MBP) for youth

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Categorical codes	Group		
	Combined (n=33)	Scientists (n=16)	Instructors (n=17)
*Embodying mindfulness generally	100%	100%	100%
*Building connection with students	100%	100%	100%
*Creating safe accepting group	100%	100%	100%
*Clear communication skills/accessibility	97%	100%	94%
*Embodying compassion	97%	94%	100%
*Having sustained formal mindfulness practice	94%	94%	94%
*MBP instruction is flexible and adaptable	94%	94%	94%
*Embodying empathy/perspective taking	91%	81%	100%
*Embodying acceptance	91%	81%	100%
*Embodying non-judgment	85%	75%	94%
*Personal training in mindfulness practice	76%	63%	88%
‡Having an informal mindfulness practice	73%	69%	76%
‡Embodying authenticity	73%	56%	88%
Knowledge of child development	61%	56%	65%
‡Embodying loving kindness	61%	44%	76%
‡Facilitating dialogue to contextualize MBP	61%	44%	76%
†Training/knowledge of specific MBP curriculum	58%	75%	41%
Classroom behavior management	58%	56%	59%
‡Being resilient to challenges	58%	38%	76%
MBP supervision/consultation access	45%	25%	65%

... non-consensus competencies not displayed to conserve space