A group of children and adults are sitting in a circle on the floor in a library. They are engaged in a mindfulness activity, with some children holding their hands in a prayer position. A Buddhist monk in maroon robes is seated in the center, interacting with the children. The background shows bookshelves filled with books.

Emerging Research in Promoting Adolescents' Social, Emotional, and Cognitive Competence and Well-Being through Mindfulness-Based Programs

Kimberly A. Schonert-Reichl, Ph.D.
Banff XLVIII: School Mental Health
March 21, 2016



HUMAN
EARLY LEARNING
PARTNERSHIP

OVERVIEW

1. Background and a story
2. Why now?
3. What now? – Integrating Social and Emotional Learning and Mindfulness-Based Educational Interventions
4. The MindUP Program
5. Research Findings on MindUP
6. SMART + MindUp – initial findings
7. Future Directions



A STORY

"Human beings of all ages are happiest and able to deploy their talents to best advantage" when they experience *trusted others* as "standing behind them." (Bowlby, 1973, p. 25)

Key Messages

- Find something that you like about every child.
- Lead with compassion.
- Use the mindset of “presumed competence.”

TAKE HOMES MESSAGES

1. Create caring environments and relationships with students so that they feel loved, supported, and nurtured.
2. Provide students with explicit and intentional opportunities to develop specific skills that will foster their social and emotional competence, happiness, and well-being.
3. Promoting educators' and other front-line workers with explicit opportunities to practice self-care and develop social and emotional competence and well-being is critical for this.



THE LEARNING CONTEXT



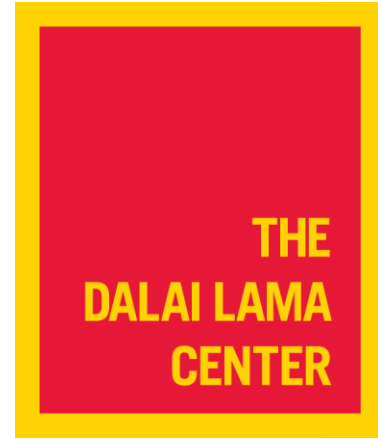
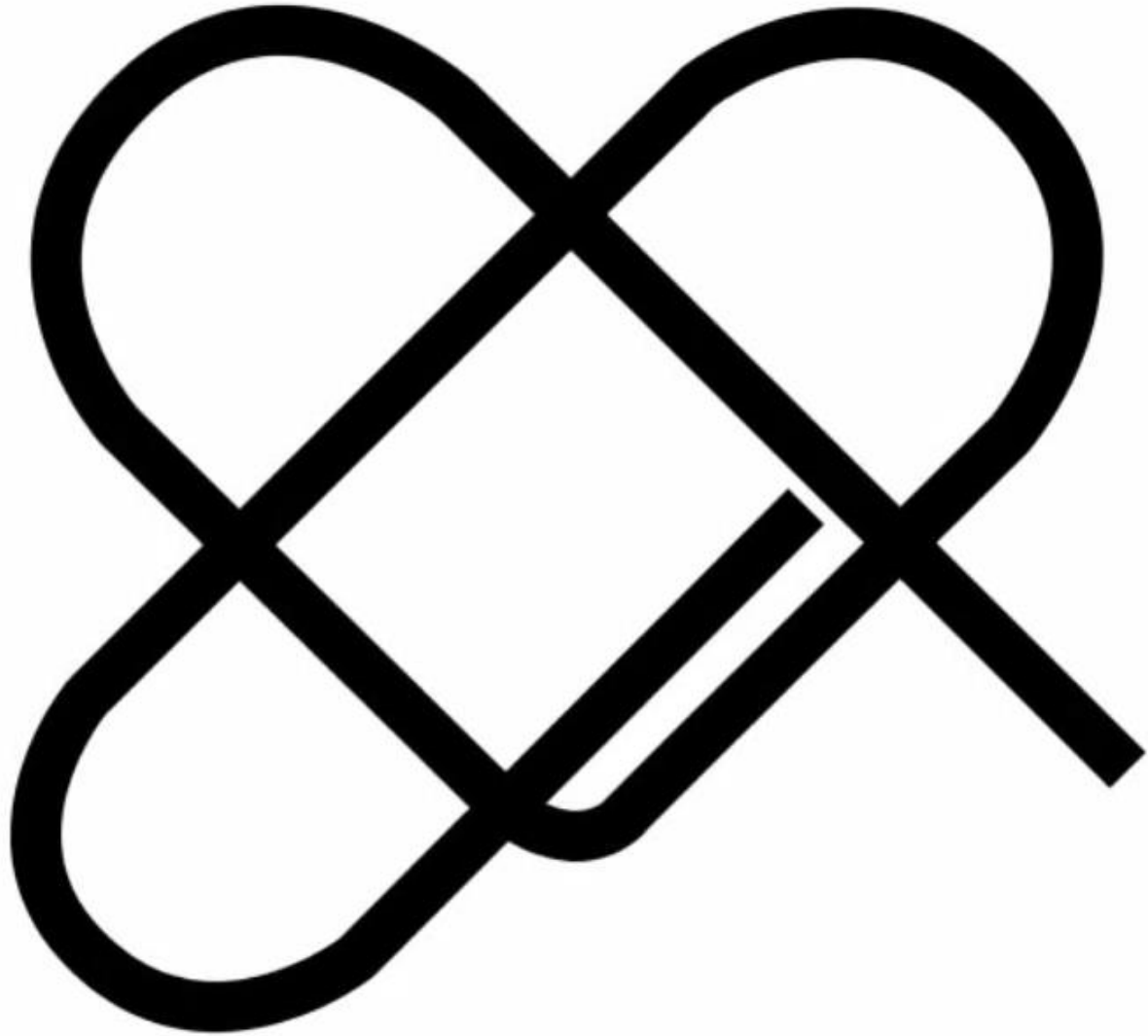
SEL OF STUDENTS



SEL OF TEACHERS

Educating the Heart & Mind in School

A group of children are sitting on the floor in a classroom, engaged in a learning activity. In the foreground, a young girl with blonde hair, wearing a blue and white plaid shirt and jeans, is clapping her hands. To her left, another girl in a blue dress is also clapping. In the background, several other children are visible, some clapping and some gesturing. A woman with a blue tinsel wig is visible in the background, possibly a teacher or a parent. The scene is set in a classroom with wooden walls and a carpeted floor.



FOR PEACE+EDUCATION

Educating the Heart
Video

Practical resources for promoting social and emotional learning in students

*Dalai Lama Center – “Heart-Mind online”

<http://www.heartmindonline.org/>

Collaborative for Academic, Social, and Emotional Learning

www.casel.org

Edutopia

<http://www.edutopia.org>

SEL School (Great Teachers and Leaders)

<http://www.gtlcenter.org/sel-school>

*Social and Emotional Learning Resource Finder (UBC)

<http://www.selresources.com/sel-resources/>

Greater Good Science Center

<http://greatergood.berkeley.edu/>

Mindfulness for Teens

<http://mindfulnessforteens.com/>



WHY NOW?



SLEEP

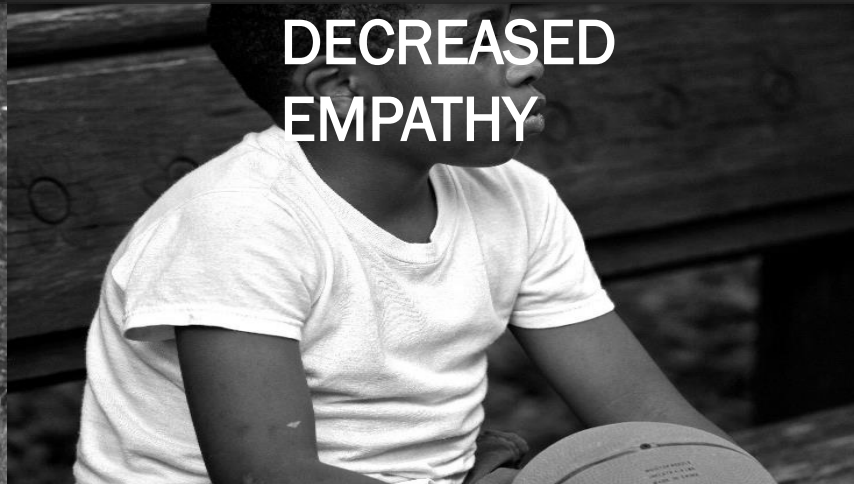


STRESS

Changes and Challenges: Risk Factors



BULLYING



DECREASED
EMPATHY



MENTAL ILLNESS



Stress and Mental Illness

A close-up, profile view of a man with a beard and a young girl with blonde hair, both looking towards each other. The man is on the left, and the girl is on the right. The background is blurred, showing what appears to be an outdoor setting with a wooden fence.

STRESS CONTAGION

Milkie & Warner, 2011, Classroom learning environments and the mental health of first grade children *Journal of Health and Social Behavior*.

Oberle & Schonert-Reichl, 2016, *Stress contagion in the classroom? The link between classroom teachers' burnout and morning cortisol in elementary*



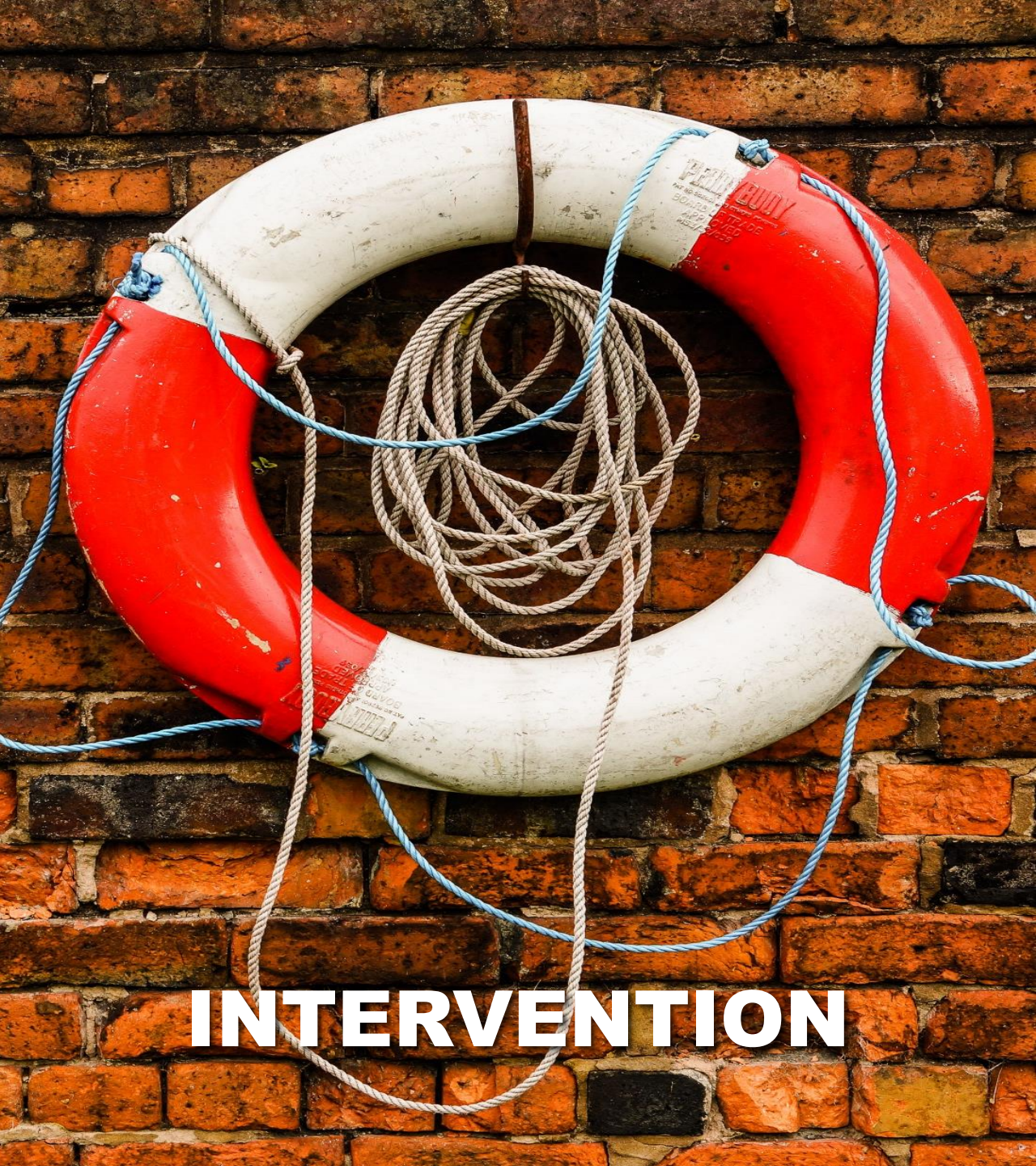
Decreases in empathy in 14,000 college students
between 1979 and 2009, especially since 2000
(Konrath et al., 2011)



**WHAT
NOW?**



The Science of Resiliency



INTERVENTION



PREVENTION



Social & Emotional Fitness

SOCIAL & EMOTIONAL LEARNING (SEL): A Growing Movement



Social & Emotional Learning Core Competencies





IMPORTANT for

SCHOOL & CAREER

SUCCESS

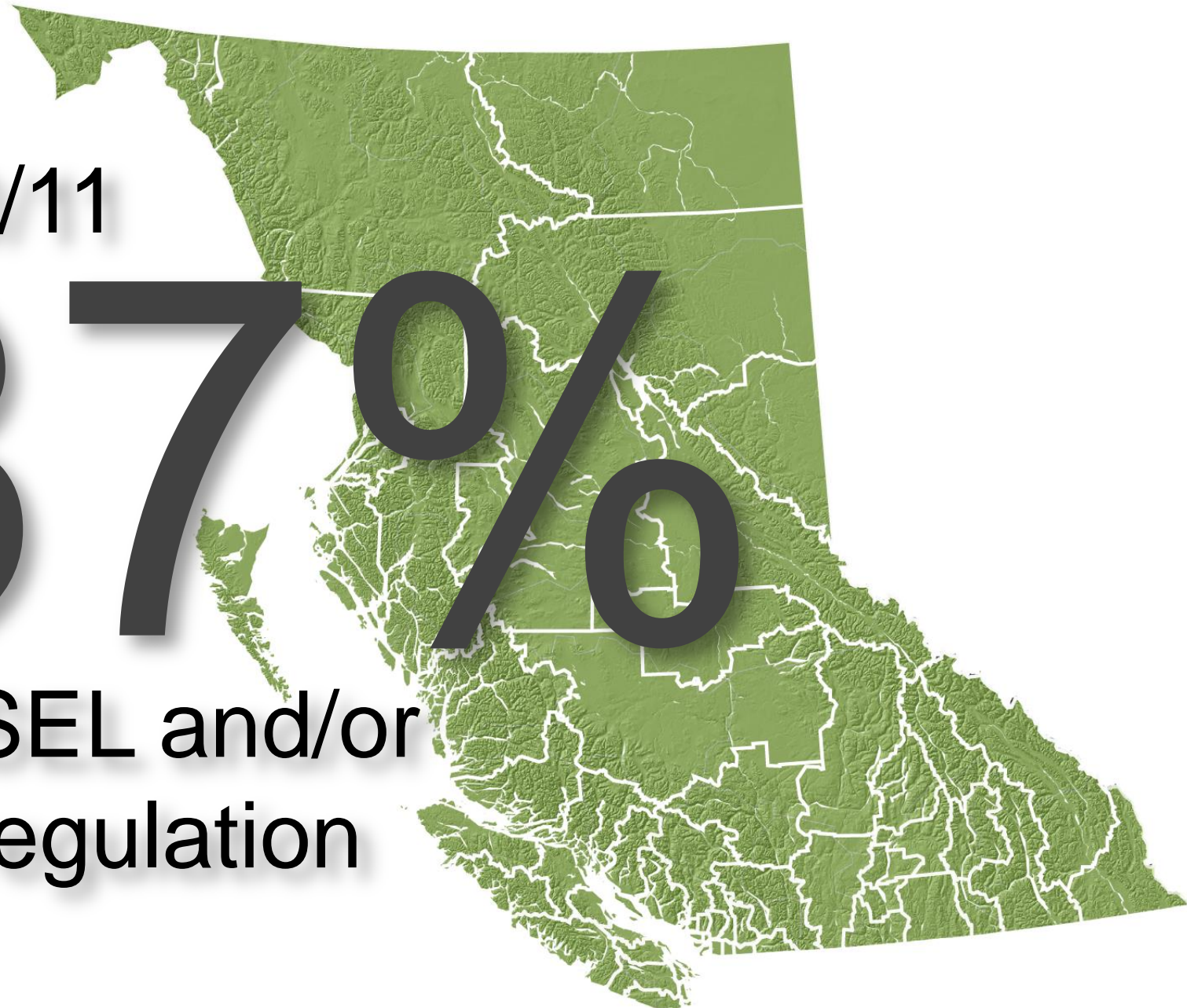
The Context in BC

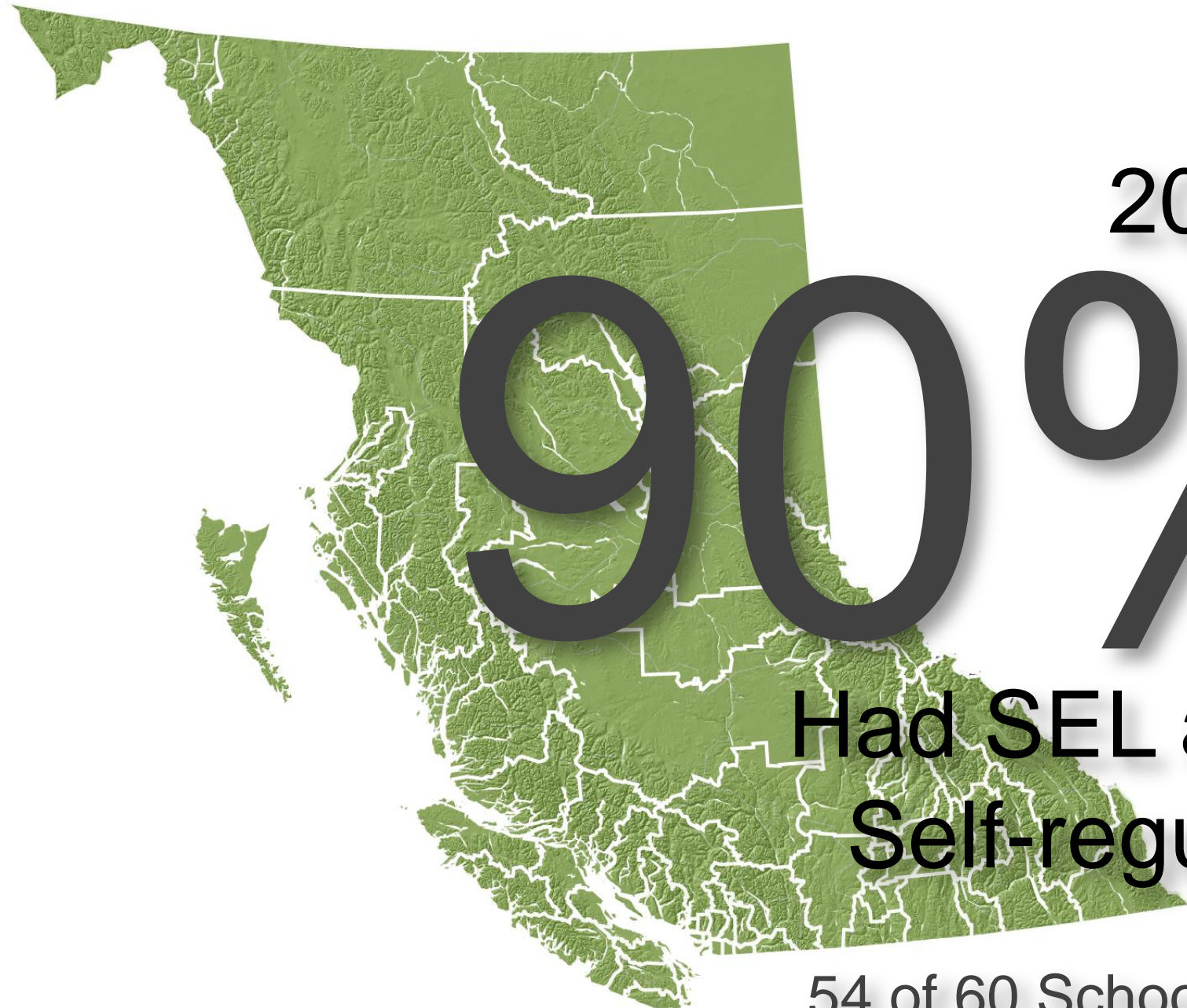


2010/11

37%

Had SEL and/or
Self-regulation





2013/14

90%

Had SEL and/or
Self-regulation

54 of 60 School Districts

BC Cross Curricular Competencies

Competencies

Three cross-curricular competencies, each with a number of sub-domains:

Thinking Competency

Communication Competency

Personal and Social Competency

Positive Personal and Cultural Identity

Personal Awareness and Responsibility

Social Awareness and Responsibility



The Science Behind Social and Emotional Learning: Findings from Recent Research





**Finding #1: Social and Emotional
Development in the Early Years
Predicts Important Adult Outcomes**



“Empathic and prosocial kids flourish”

Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health*, online.

“Nice Kids Finish First”

- In kindergarten, teachers’ rated children’s prosocial skills – cooperation, listening, getting along with others.
- Followed 753 children 13 to 19 years later
- Kindergarten prosocial skills predicted whether a young adult:
 - Graduated from high school
 - Completed a college degree
 - Obtained stable employment
 - Was on public assistance (inversely related)
 - Was involved with the police (inversely related)

**Finding #2: SOCIAL &
EMOTIONAL SKILLS
ARE MALLEABLE**



YOU CAN INCREASE HAPPINESS



www.bayanjargal.com
"abundant in happiness"

An experiment

- ❖ Write down something that happened to you this past week for which you are grateful.
- ❖ If you wish to do so, share with another person nearby.

How to promote happiness

Writing letters of gratitude

Performing acts of kindness

Imagining your best possible self

Recalling an intensely positive experience

Practicing mindfulness



Kindness Counts: Prompting Prosocial Behavior in Preadolescents Boosts Peer Acceptance and Well-Being

Kristin Layous^{1*}, S. Katherine Nelson¹, Eva Oberle², Kimberly A. Schonert-Reichl², Sonja Lyubomirsky¹

1 Department of Psychology, University of California, Riverside, California, United States of America, **2** Department of Educational and Counseling Psychology and Special Education, University of British Columbia, Vancouver, British Columbia, Canada

Abstract

At the top of parents' many wishes is for their children to be happy, to be good, and to be well-liked. Our findings suggest that these goals may not only be compatible but also reciprocal. In a longitudinal experiment conducted in 19 classrooms in Vancouver, 9- to 11-year olds were instructed to perform three acts of kindness (versus visit three places) per week over the course of 4 weeks. Students in both conditions improved in well-being, but students who performed kind acts experienced significantly bigger increases in peer acceptance (or sociometric popularity) than students who visited places. Increasing peer acceptance is a critical goal, as it is related to a variety of important academic and social outcomes, including reduced likelihood of being bullied. Teachers and interventionists can build on this study by introducing intentional prosocial activities into classrooms and recommending that such activities be performed regularly and purposefully.

Citation: Layous K, Nelson SK, Oberle E, Schonert-Reichl KA, Lyubomirsky S (2012) Kindness Counts: Prompting Prosocial Behavior in Preadolescents Boosts Peer Acceptance and Well-Being. PLoS ONE 7(12): e51380. doi:10.1371/journal.pone.0051380

Editor: Frank Krueger, George Mason University/Krasnow Institute for Advanced Study, United States of America

Received: August 12, 2012; **Accepted:** November 6, 2012; **Published:** December 26, 2012

Copyright: © 2012 Layous et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Funding: These authors have no support or funding to report.

Competing Interests: The authors have declared that no competing interests exist.

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Introduction

At the top of parents' many wishes is for their children to be happy, to be good, and to have positive relationships with others

benefits beyond personal happiness, as prosocial behavior predicts academic achievement and social acceptance in adolescents [16]. The dearth of work on enhancing happiness and prosociality in youth, coupled with evidence of their many benefits, highlights the

Results

ACT OF KINDNESS

- Gave a friend a nice snack
- Hugged Vanessa
- I listened to people who have trouble
- Moving a piano
- I gave a snack away without anyone knowing
- Holding the door open
- Cleaning toilets

WHEREABOUTS

- Grandpa's
- Library
- 20th & Dunbar
- Swings
- My friend's apartment
- Fraser River
- Classroom
- Bus
- My house's garden
- Children's festival

Social-Emotional Learning and Mindfulness





Mind Full, or Mindful?

DAY-TO-DAY EXPERIENCES

Directions: For each sentence, indicate how well it describes you by circling the number that describes HOW TRUE it is for you. Read each sentence carefully. Answer honestly. Thank you!!

Experiences	Almost Never	Not Very Often at All	Not Very Often	Somewhat Often	Very Often	Almost Always
1. I could be feeling a certain way and not realize it until later.	1	2	3	4	5	6
2. I break or spill things because of carelessness, not paying attention, or thinking of something else.	1	2	3	4	5	6
3. I find it hard to stay focused on what's happening in the present moment.	1	2	3	4	5	6
4. Usually, I walk quickly to get where I'm going without paying attention to what I experience along the way.	1	2	3	4	5	6

Mindfulness Defined

- ❖ Mindfulness is considered to be a state of being aware of and attentive to the present moment.
- ❖ In addition, mindfulness has been described as a state of consciousness with a core characteristic of being open, receptive and non-judgmental.

(Brown & Ryan, 2003, Kabat-Zinn 1990)

Mindfulness as a natural capacity

AND

Mindfulness through cultivation

Social & Emotional Learning Core Competencies

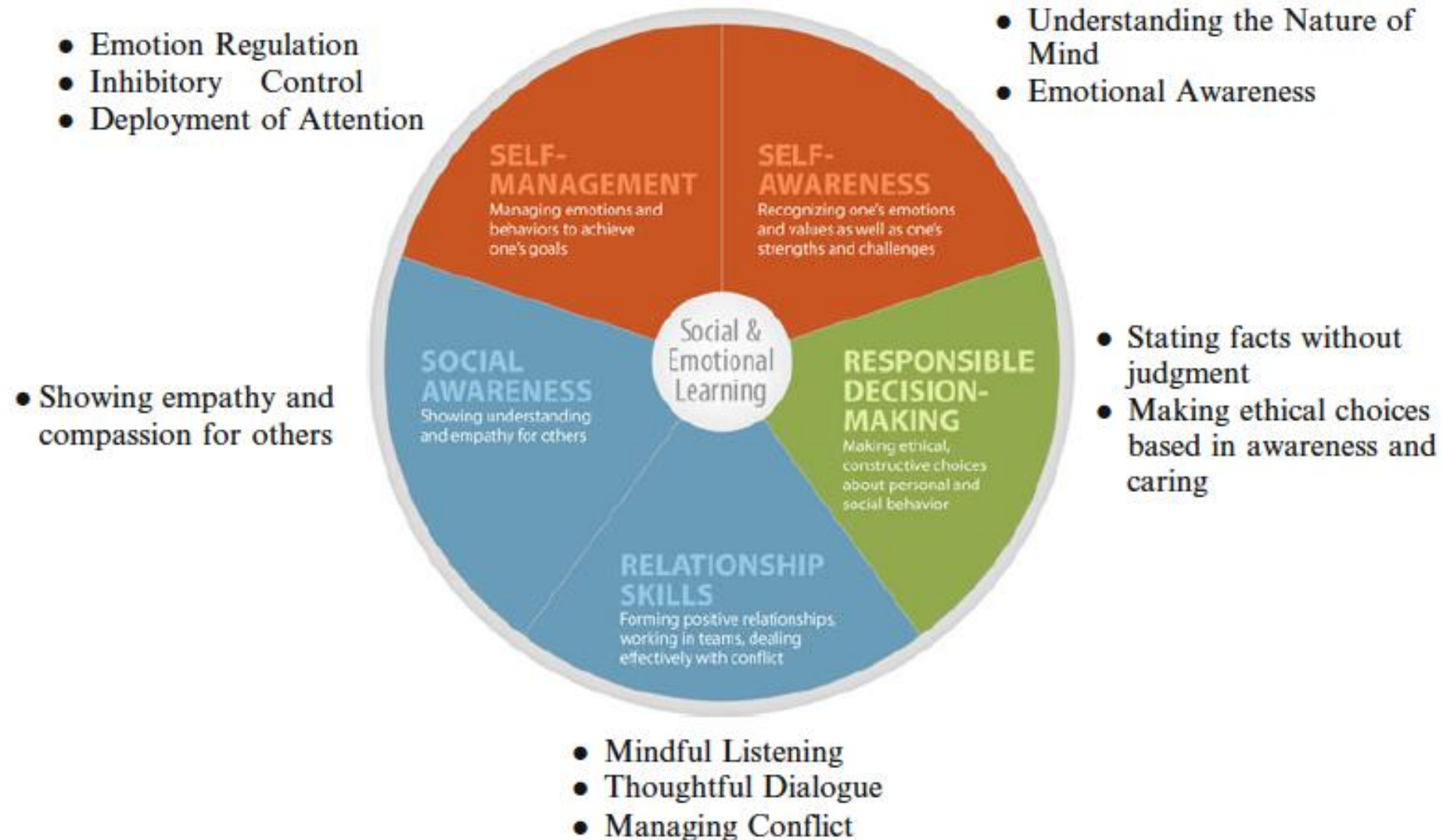


Fig. 5.1 Social emotional competencies and mindful awareness. Adapted from Collaborative for Academic, Social, and Emotional Learning (2013) and Greenberg (2014)

Lawlor, M. S. (2016). Mindfulness and social emotional learning: A conceptual framework. In K. A. Schonert-Reichl & R. W. Roeser (Eds.), *Handbook of Mindfulness in Education*. New York: Springer Press



Mindfulness Interventions for Children and Youth



instant help solutions

the *mindful teen

**powerful skills to help
you handle stress one
moment at a time**



DZUNG X. VO, MD, FAAP



Mindfulness in education



Kimberly



All Videos News Images Maps More Search tools



About 28,000,000 results (0.51 seconds)

Mindfulness in Education - MindfulSchools.org

Ad www.mindfulschools.org/Education

Full K-12 Curriculum for Schools Register for our Six Week Class!

Mindfulness & Education - mindfulnessstudies.com

Ad www.mindfulnessstudies.com/ (647) 524-6216

Mindfulness training for educators and teachers in downtown Toronto
Faculty: The Centre For Mindfulness Studies

Scholarly articles for Mindfulness in education

The effects of a mindfulness-based education program ... - Schonert-Reichl - Cited by 194

Integrating mindfulness training into K-12 education: ... - Meiklejohn - Cited by 134

Relational mindfulness in education - Burrows - Cited by 7

Association for Mindfulness in Education —

www.mindfuleducation.org/

Bridging the Hearts and Minds of Youth: Mindfulness and Compassion in the ... 2016

Mindfulness in Education Conference — Mindfulness: Foundation for

A Systematic Review of Mindfulness-Based Interventions for Youth in School Settings

**Joshua C. Felver • Cintly E. Celis-de Hoyos •
Katherine Tezanos • Nirbhay N. Singh**

© Springer Science+Business Media New York 2015

Abstract There is a growing interest in the use of mindfulness-based interventions (MBI) on youth, which has recently expanded to include the study of students in school settings. This article systematically reviewed the existing literature of applied studies using MBI with students in school settings in order to identify limitations in the scientific literature and inform future research directions. Twenty-eight studies were selected for review and were coded across multiple domains,

based interventions (MBI), have been shown to be generally effective for a wide range of psychosocial difficulties (Khoury et al. 2013), and may be specifically beneficial for youth (Zoogman et al. 2014), prompting calls for further research on the utility of MBI with children and adolescents (Burke 2010; Mind and Life Education Research Network 2012). Given that MBI appear to be beneficial for youth, researchers have suggested that this technology be

Mindfulness Interventions with Youth: A Meta-Analysis

Sarah Zoogman · Simon B. Goldberg · William T. Hoyt ·
Lisa Miller

© Springer Science+Business Media New York 2014

Abstract Mindfulness meditation is a well-validated intervention for symptoms of depression and anxiety disorders in adults, with meta-analyses showing moderate effect sizes. This study marks the first published meta-analysis of the burgeoning literature on mindfulness meditation with youth (conducted between 2004 and 2011) and identifies specific outcomes and sub-populations for whom mindfulness may be particularly helpful. Inclusion criteria were peer-reviewed journal articles published in English, study participants under 18 years of age, and a description in the methods section of mindfulness as the chief component of an intervention. A

participants recruited from schools, the findings of this meta-analysis suggest that future research might focus on youth in clinical settings and target symptoms of psychopathology.

Keywords Meta-analysis · Mindfulness · Mindfulness meditation · Psychopathology · Youth

Introduction

Meta-analyses conducted over reports of clinical trials of

Nurturing Mindfulness in Children and Youth: Current State of Research

Mark T. Greenberg and Alexis R. Harris

Pennsylvania State University

ABSTRACT—*This article reviews the current state of research on contemplative practices with children and youth. It reviews contemplative practices used both in treatment settings and in prevention or health promotion contexts, including school-based programs. Although there is great interest and potential promise for contemplative interventions, enthusiasm for promoting such practices outweighs the current evidence supporting them. Interventions that nurture mindfulness in children and youth may be a feasible and effective method of building resilience in universal populations and in the treatment of disorders in clinical populations. This review suggests that*

Recent years have witnessed an explosion of interest in secular mindfulness strategies (including meditation, attention training, yoga, and other techniques) as methods to support wellness. Research with adults has clearly shown benefits for promoting health, alleviating pain, and reducing depression and anxiety (Arias, Steinberg, Banga, & Trestman, 2006; Kabat-Zinn, 2003). Furthermore, basic research has shown that certain methods are likely to have these effects because they alter organization and action of neural circuitry, which is associated with alterations in stress reactivity and immune function (Davidson et al., 2003). Thus, it is not surprising that such practices are rapidly growing in application for children and youth. One merely needs to enter

Mindfulness in Behavioral Health
Series Editor: Nirbhay N. Singh

Kimberly A. Schonert-Reichl
Robert W. Roeser
Editors

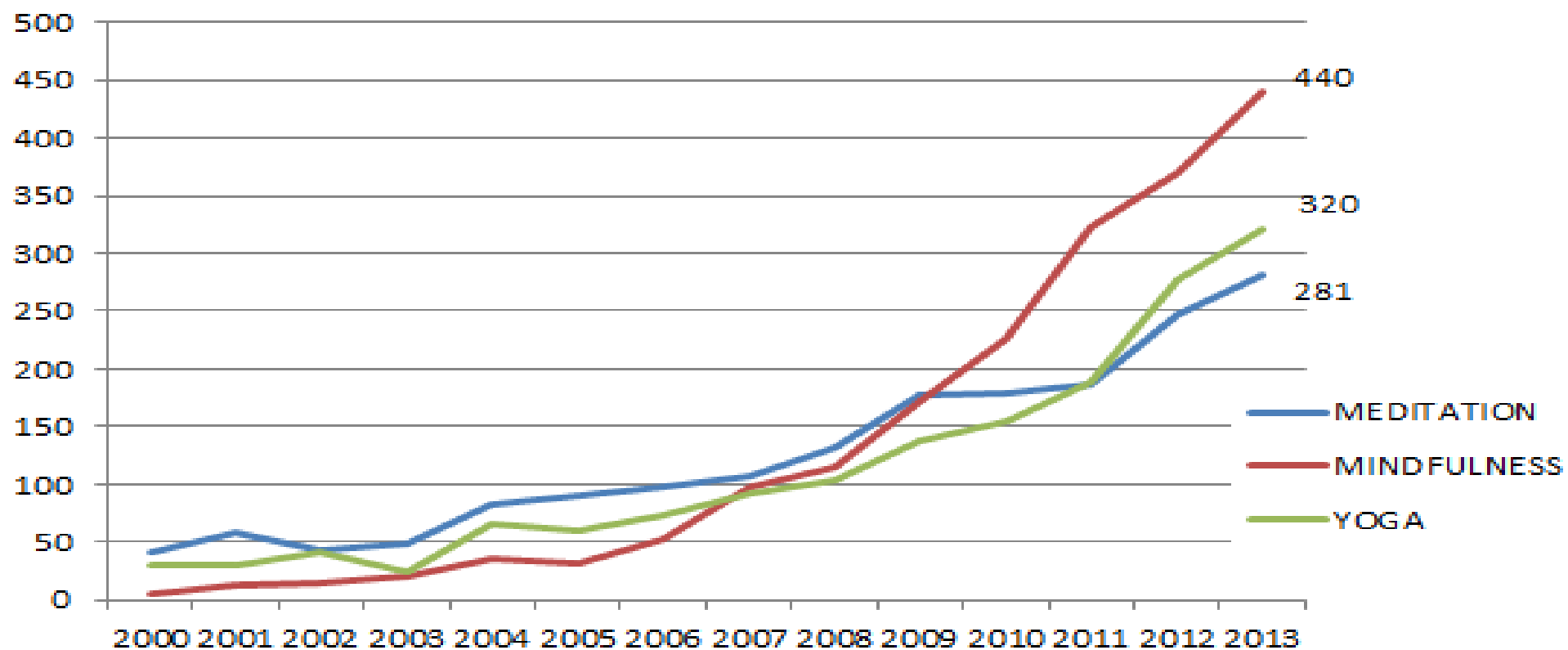
Handbook of Mindfulness in Education

Integrating Theory and Research into Practice

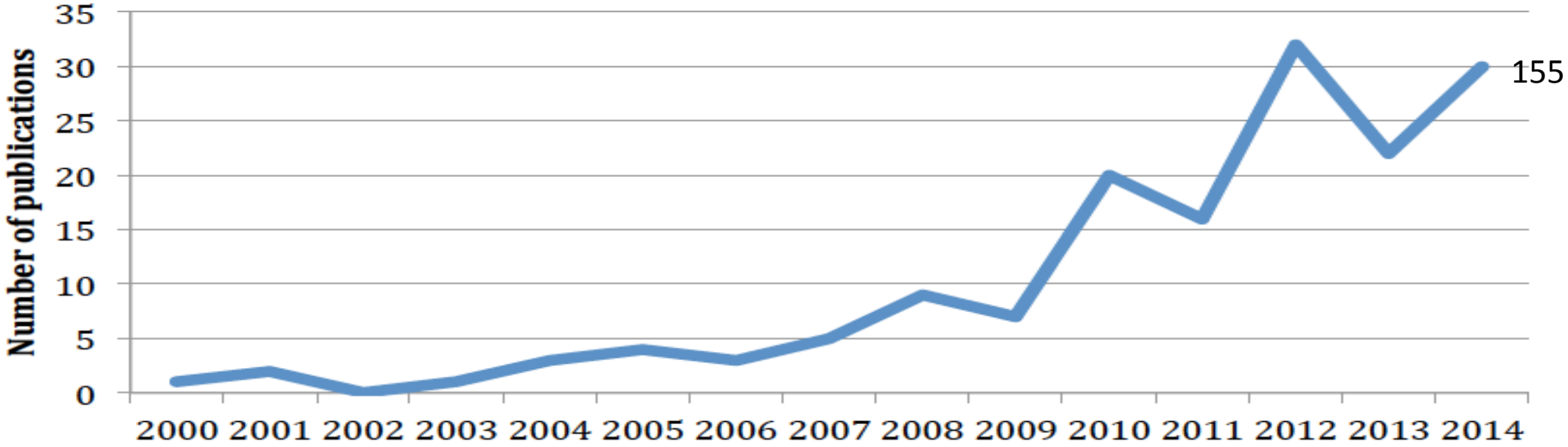
 Springer



Peer-Referreed Publications



Mindfulness in Education Articles by Year, 2000-2014



Source: Schonert-Reichl, K. A., & Roeser, R. W. (Eds.). (2016). *Mindfulness in education: Emerging theory, research, and programs*. NY: Springer.

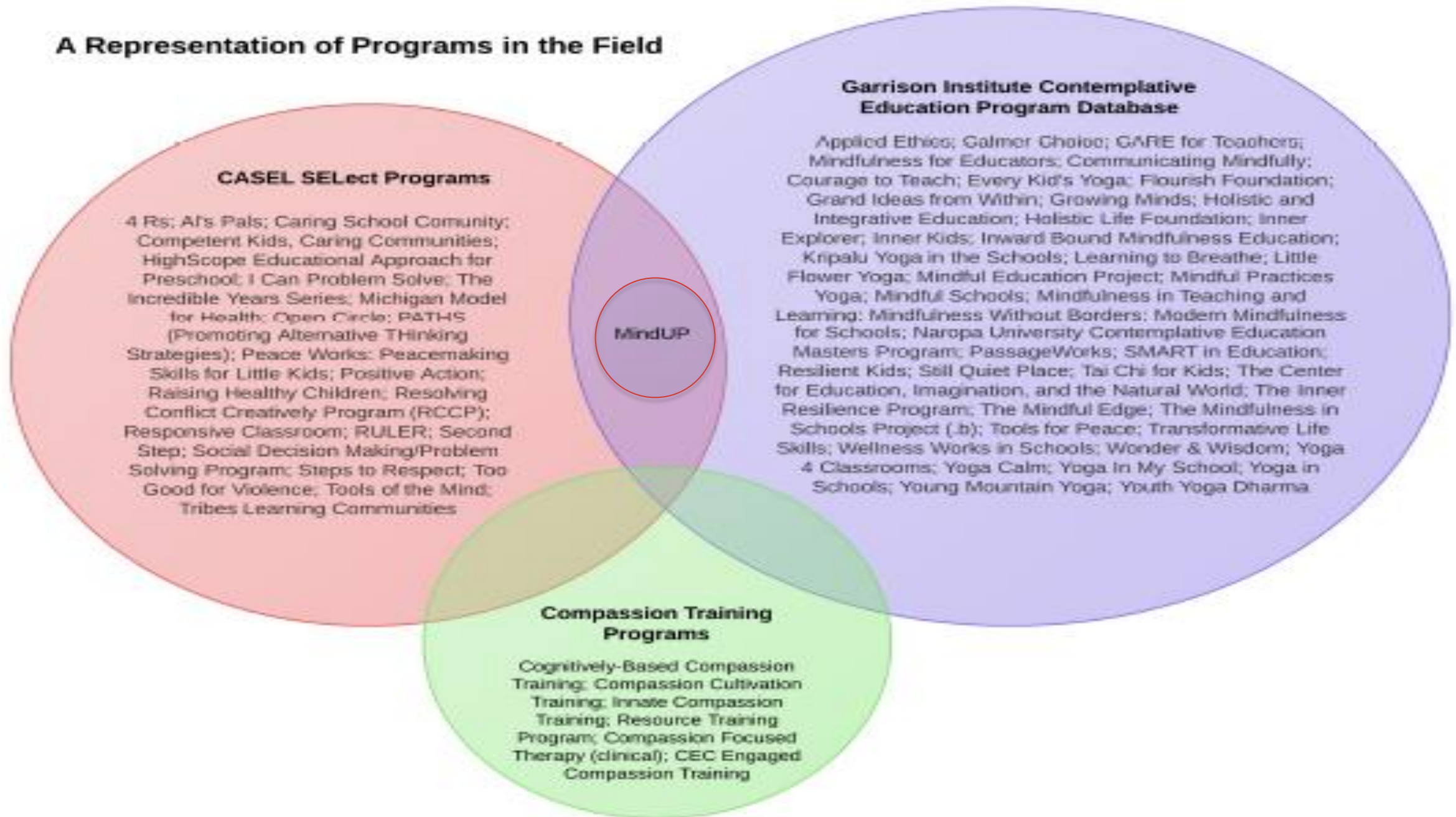
Types of Articles of the 155

- 42% theoretical/review articles
- Empirical research
 - 15% preschool/elementary school students
 - 10% middle school/high school students
 - 25% postsecondary settings
 - 6% on teachers

Research on Effects of Mindfulness with Children and Adolescents

- Major focus has been on
 - Decreasing stress and psychological symptoms
 - Increasing attention (e.g., self-regulation, executive functions)
 - Self-reports (e.g., mindfulness)
- Little focus on
 - Improving intrapersonal awareness
 - Improving interpersonal behavior and relationships
 - Increasing empathy, kindness, and compassion

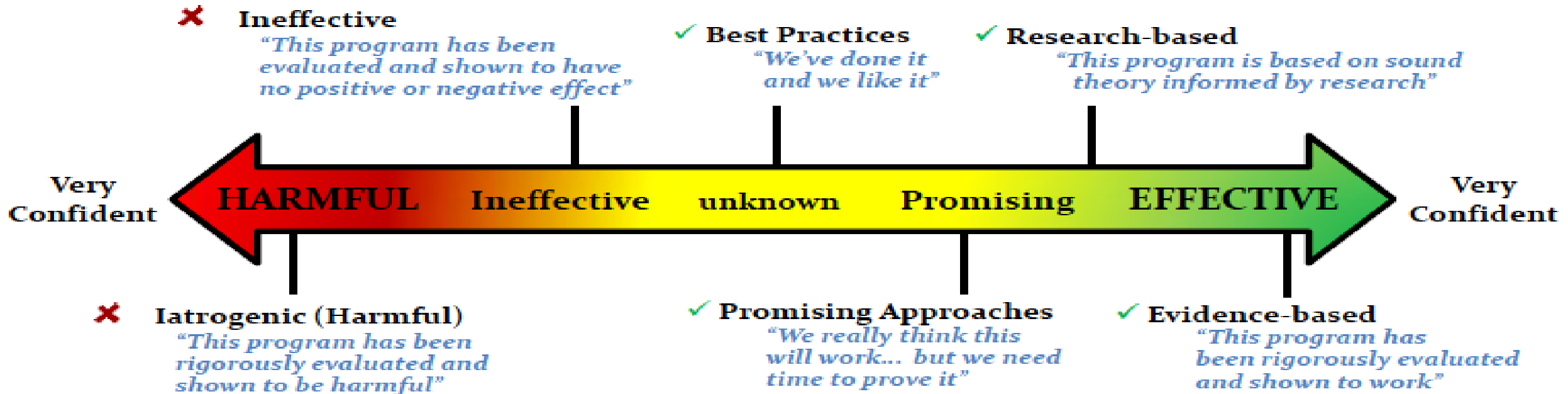
A Representation of Programs in the Field



Continuum of Confidence



- Programs can be placed along a continuum of confidence based on their evidence or theory



How confident are we that this program or practice is a good use of resources AND improves outcomes for children and families?



MINDUP





MINDUP * Kindergarten to 8th grade
(5 to 14 yrs)

Focused Classrooms • Mindful Learning • Resilient Children
SCHOLASTIC

Focused Classrooms • Mindful Learning • Resilient Students
SCHOLASTIC

Focused Classrooms • Mindful Learning • Resilient Students
SCHOLASTIC

The MINDUP Program



How Our Brains Work	Understanding Mindfulness	Focused Attention	Neuroscience Foundations
Mindful Listening	Mindful Seeing	Mindful Smelling	Self Awareness
Mindful Tasting	Mindful Moving (Pt 1)	Mindful Moving (Pt 2)	Self Management
Perspective Taking	Choosing Optimism	Savoring Happy Experiences	Social Awareness
Acting with Gratitude	Acts of Kindness	Mindful Action in Our Community	Social Action

A group of children are sitting in a garden, practicing mindfulness. They have their eyes closed and hands clasped in front of them. The background is filled with lush green plants and trees. The text is overlaid on the image.

THE CORE PRACTICE 3x a day
“the heart of the program”

PAUSE

LISTEN

BREATHE



Getting to Know and Love Your Brain

To react or to think it out.... that is the question. The way you use three key players in your brain determines how you'll respond to everything that happens around you. As you learn how to help your brain tell the difference between true emergencies and stressful situations, you'll get better at handling every situation and have more time to enjoy life!

Prefrontal Cortex

(pree-FRŪn-kōr-tek-ōs)

The prefrontal cortex, or PFC, is your site for making thoughtful decisions, doing careful calculations, solving through a problem, and staying focused on what you're doing. Interestingly, the PFC gets information only when the amygdala is calm. The PFC passes on to the hippocampus anything that is worth remembering.

Amygdala

(uh-ŌM-ē-dā-lā)

The amygdala is programmed to keep you safe at all costs. It registers and blocks information from going to your prefrontal cortex (PFC), so you can react to a threat. The problem is, it can't tell a stressful situation from a true emergency, and it can't count you to react without thinking. A useful prefrontal cortex helps keep the amygdala in check so that you can think clearly.

Hippocampus

(ih-pŏk-ŌM-pŏs)

What are your favorite memories? The ones that stick to you best? The hippocampus creates, stores, and processes all important facts and memories. The PFC passes on to it much as telling, "Huh, that was a good idea," and the hippocampus gets to work creating those memories.

Breathing

Need to keep your amygdala in check when you get stressed out? Breathe slowly. Deep, full breathing calms your amygdala and helps you think and remember clearly.



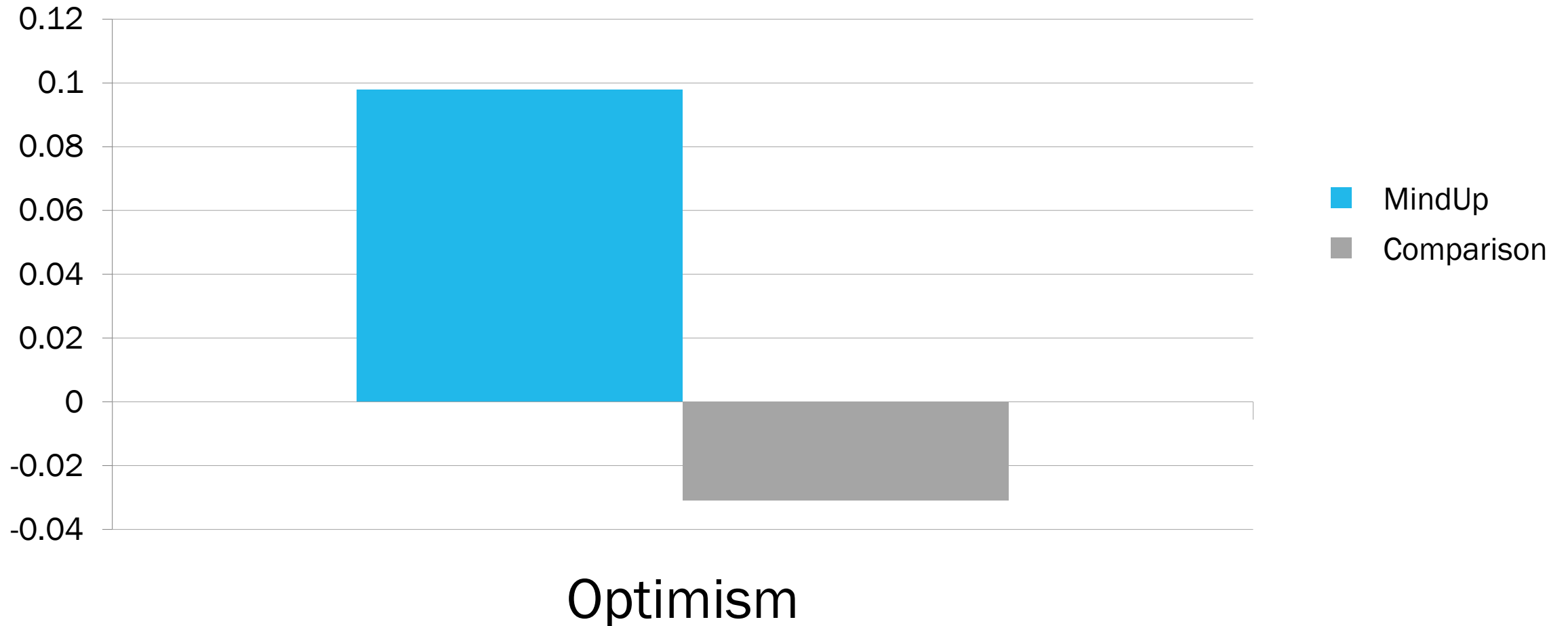
THE GRATITUDE PRACTICE

MINDUP^{*} Study 1

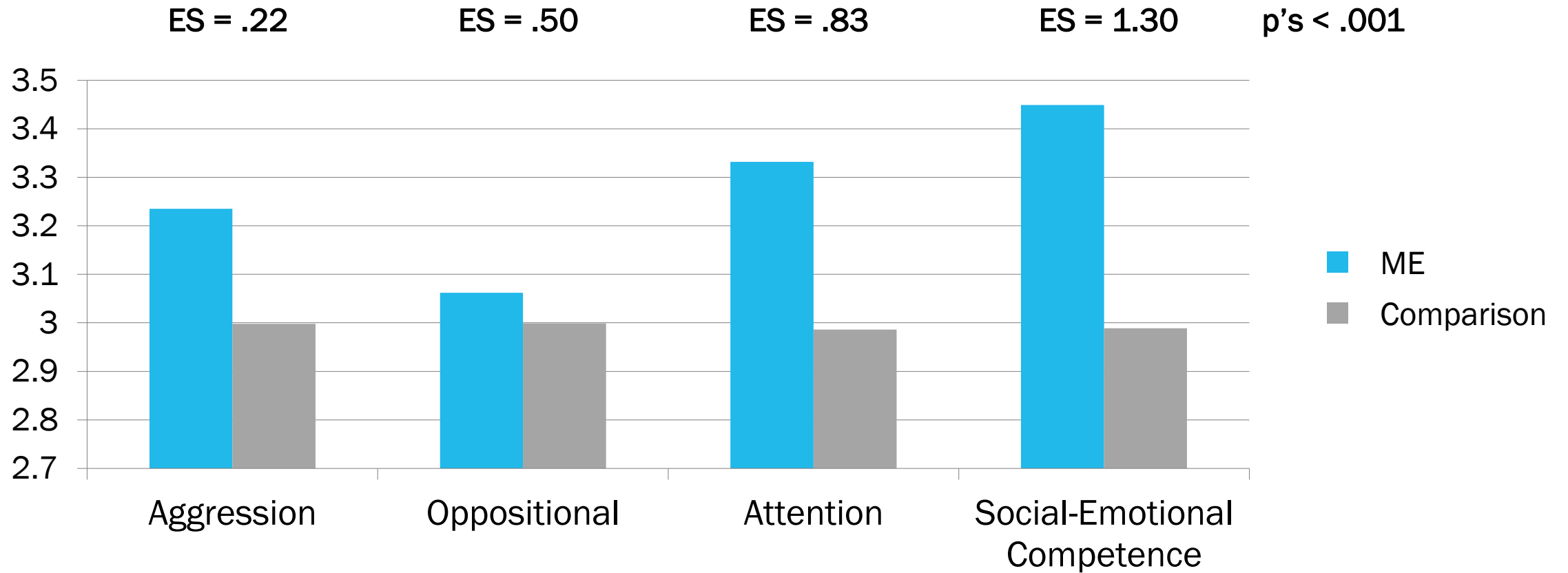
Schonert-Reichl, K. A., Lawlor, M.S. (2010). The effects of a mindfulness-based education program on pre- and early-adolescents' well-being and social and emotional competence. *Mindfulness, 1*, 137-151.

Self-Reported Optimism (change scores)

ES = .23 $p < .05$



Teacher-Reported Improvements in Behavior



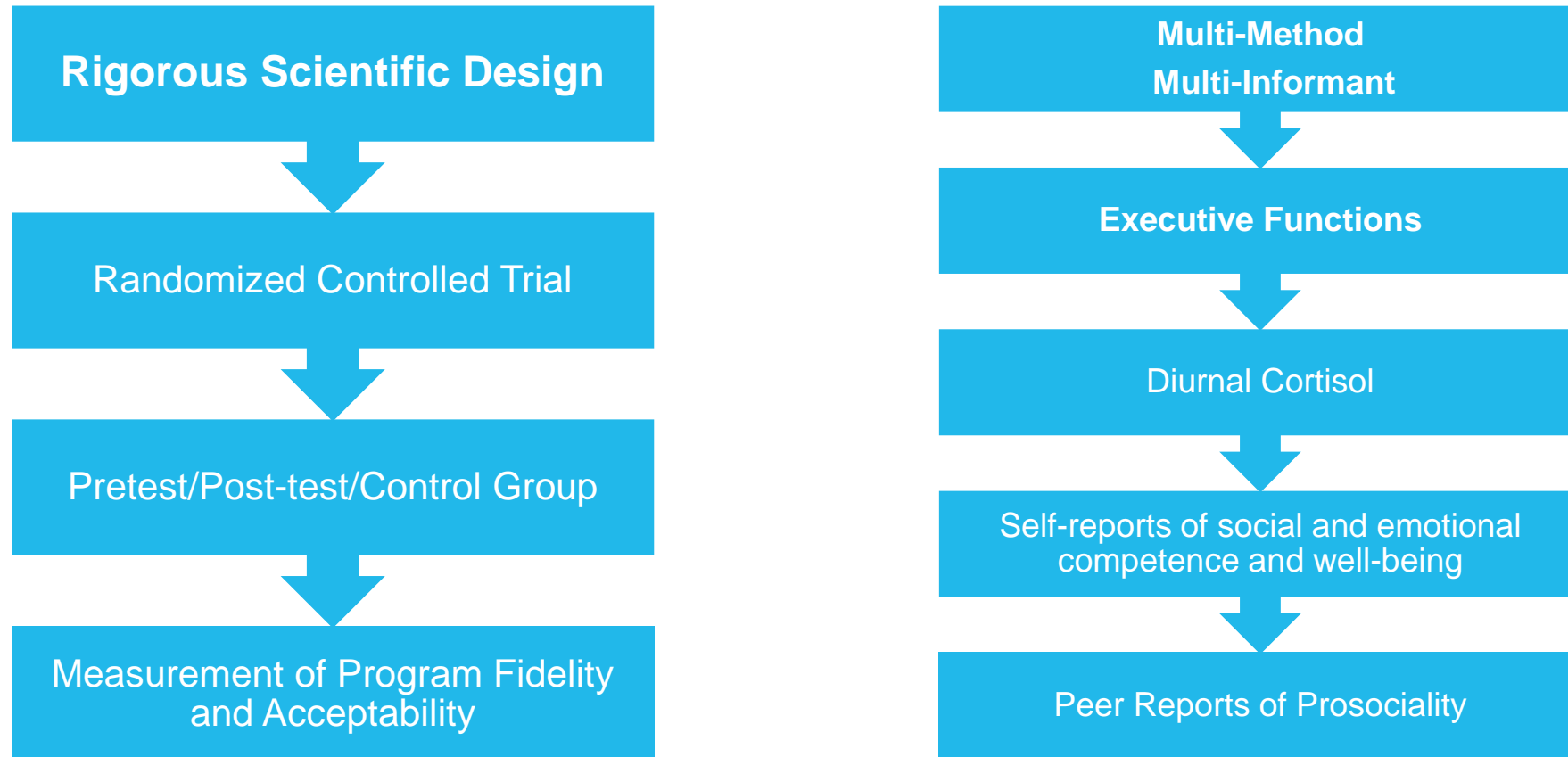
Average Proportion of Core Mindful Practices Across Classrooms

Week	# of ME program core exercises	Proportion of ME core exercises completed (avg across classrooms)	Proportion of ME core exercises completed (range)
1	3	100%	100%
2	15	72%	53-100%
3	15	83%	73-100%
4	15	92%	73-100%
5	15	88%	73-100%
6	15	83%	60-100%
7	15	83%	33-100%
8	15	87%	60-100%
9	15	92%	67-100%

MINDUP^{*} Study 2

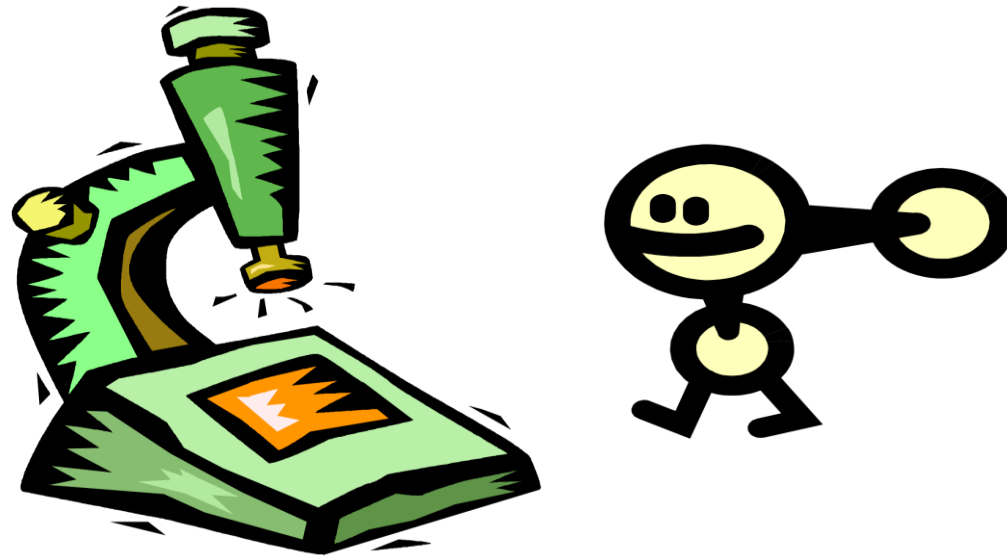
Schonert-Reichl, K. A., Oberle, E., Lawlor, M. S., Abbott, D., Thomson, K., & Diamond, A. (2015). Enhancing cognitive and social-emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A Randomized Controlled Trial. *Developmental Psychology, 51*, 52-66.

Design and Measures



The Biology of Happiness

“What can your saliva tell you about the way you feel and behave?”



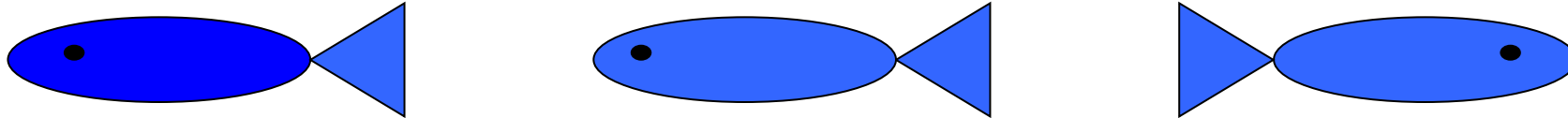
T.F. Oberlander, K. Shonert-Reichl, D. Nordstokke, N. Catherine, L. Gillespie & U. Brain.
Centre for Community Child Health Research, UBC & BC Children’s Hospital

How much saliva do we make in one day?

1.5 Litres!



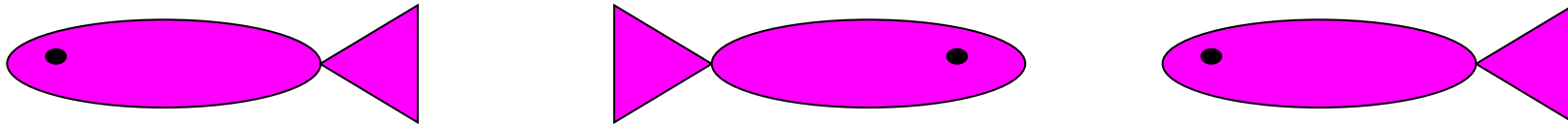
Flanker Fish: Block 1



„When the fish are BLUE, you feed the MIDDLE fish by pressing where it's facing“

Requires some inhibitory control/ selective attention & working memory.

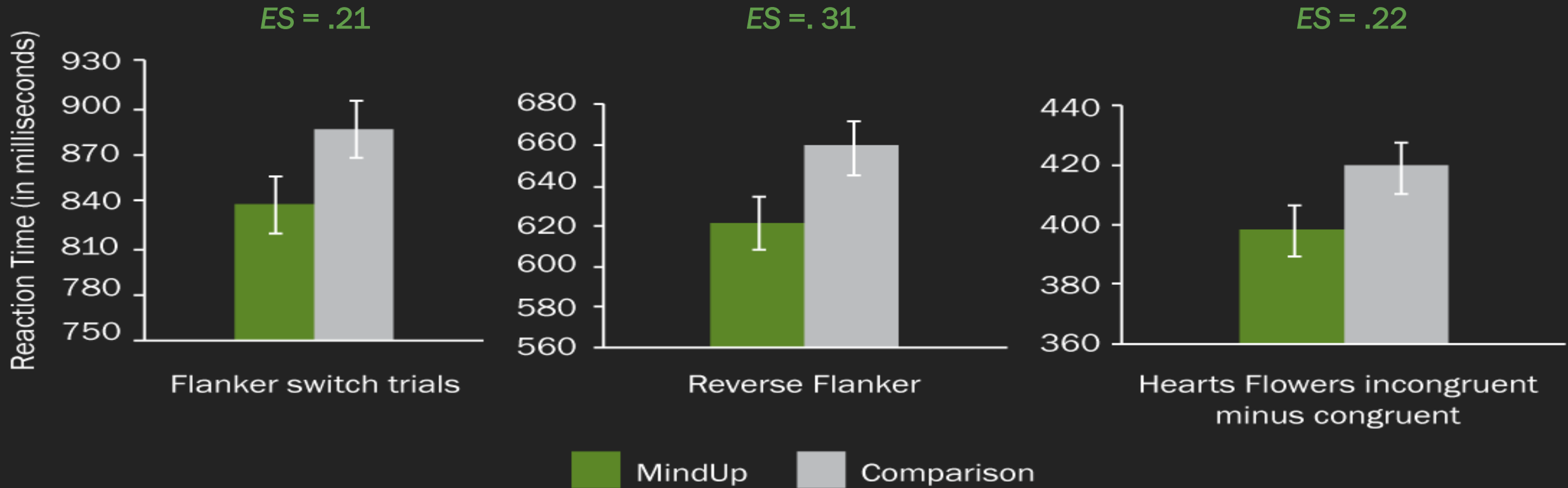
Flanker Fish: Block 2



„When the fish are PINK, you feed the OUSTIDE fish by pressing where they are facing“

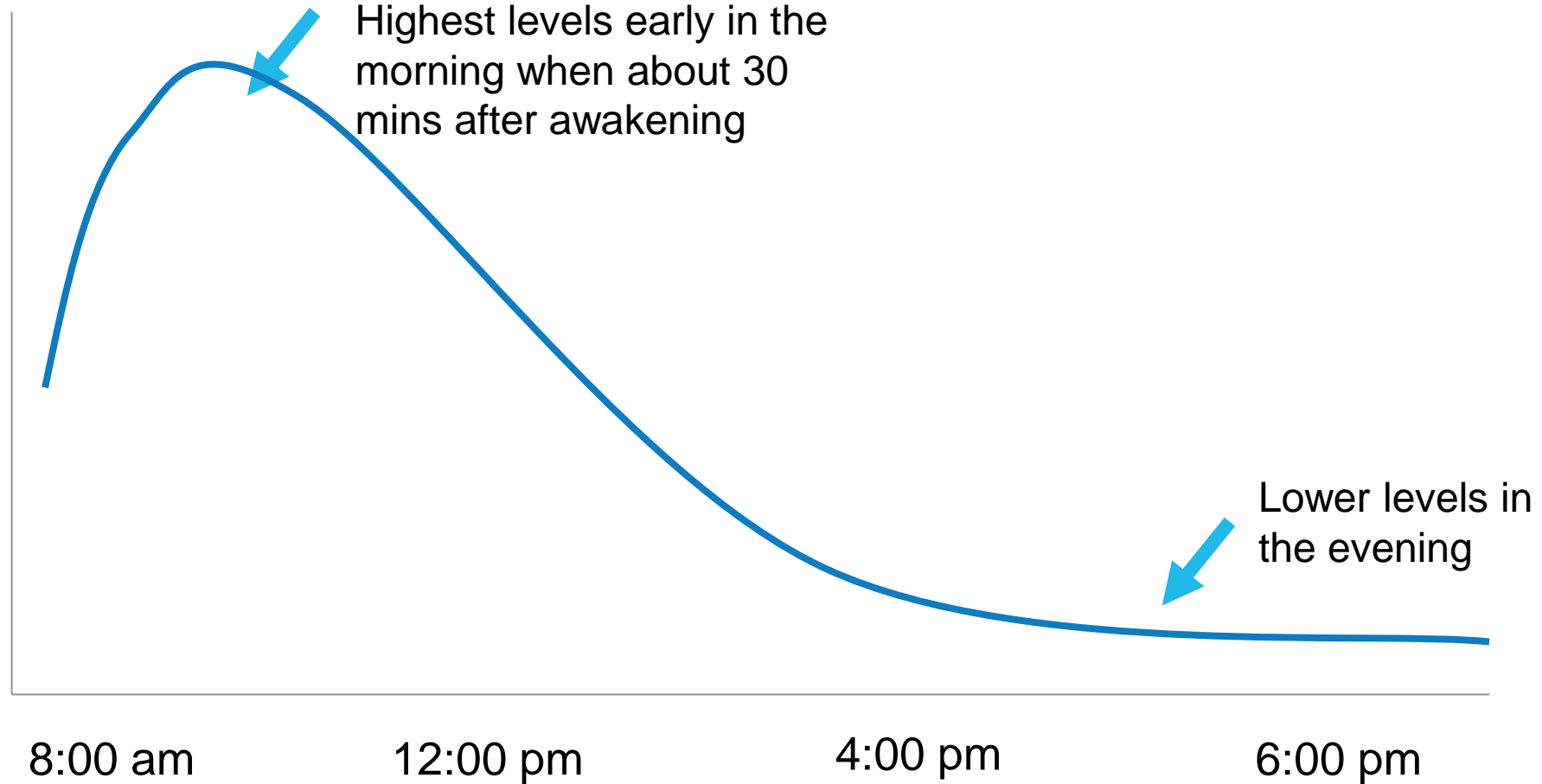
Requires inhibitory control & working memory.

Executive Functions

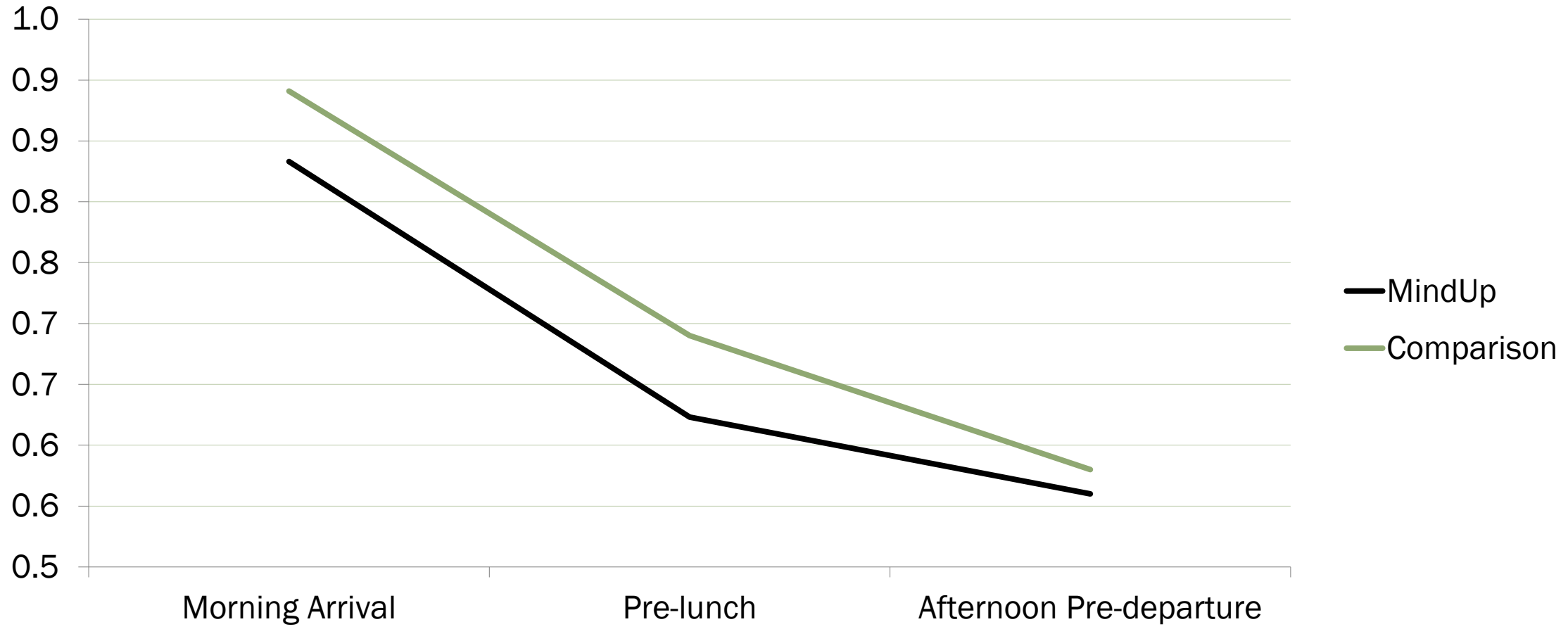


What is Your Cortisol Rhythm?

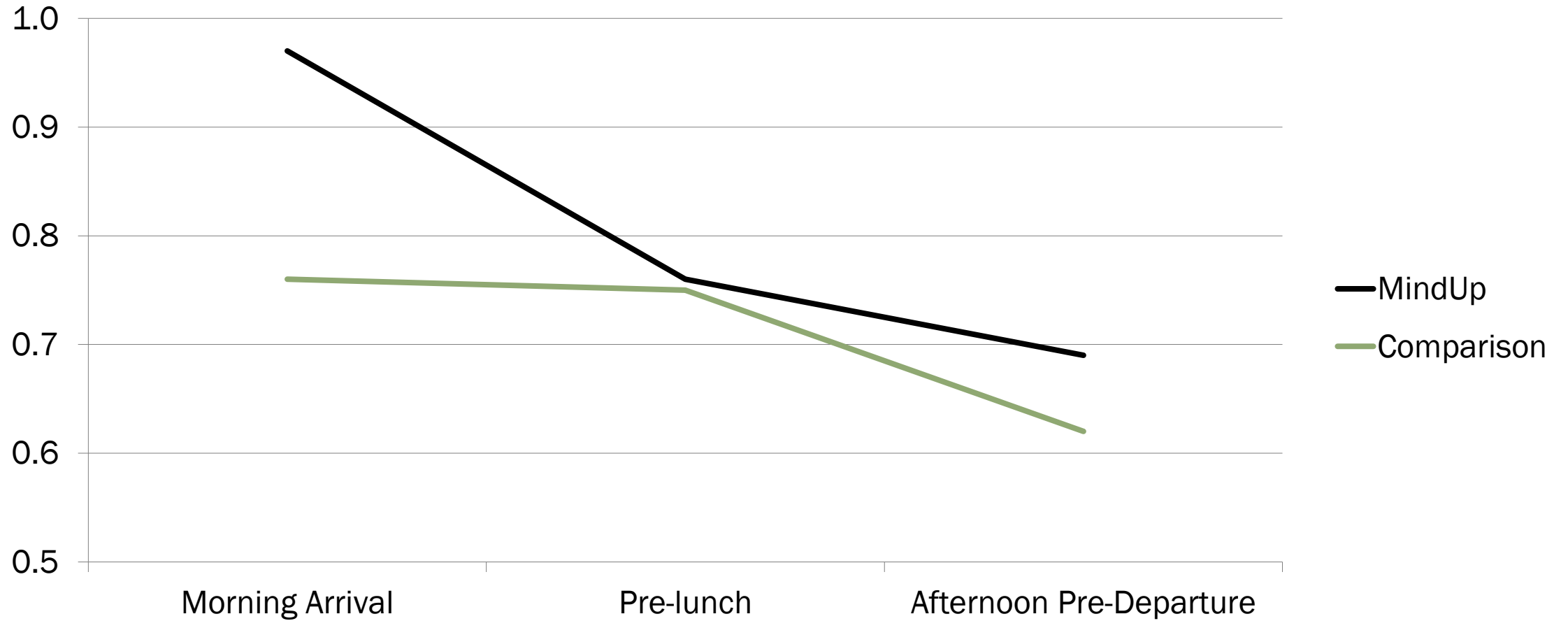
How cortisol changes throughout your day



Diurnal Cortisol: Slope at Pre-test

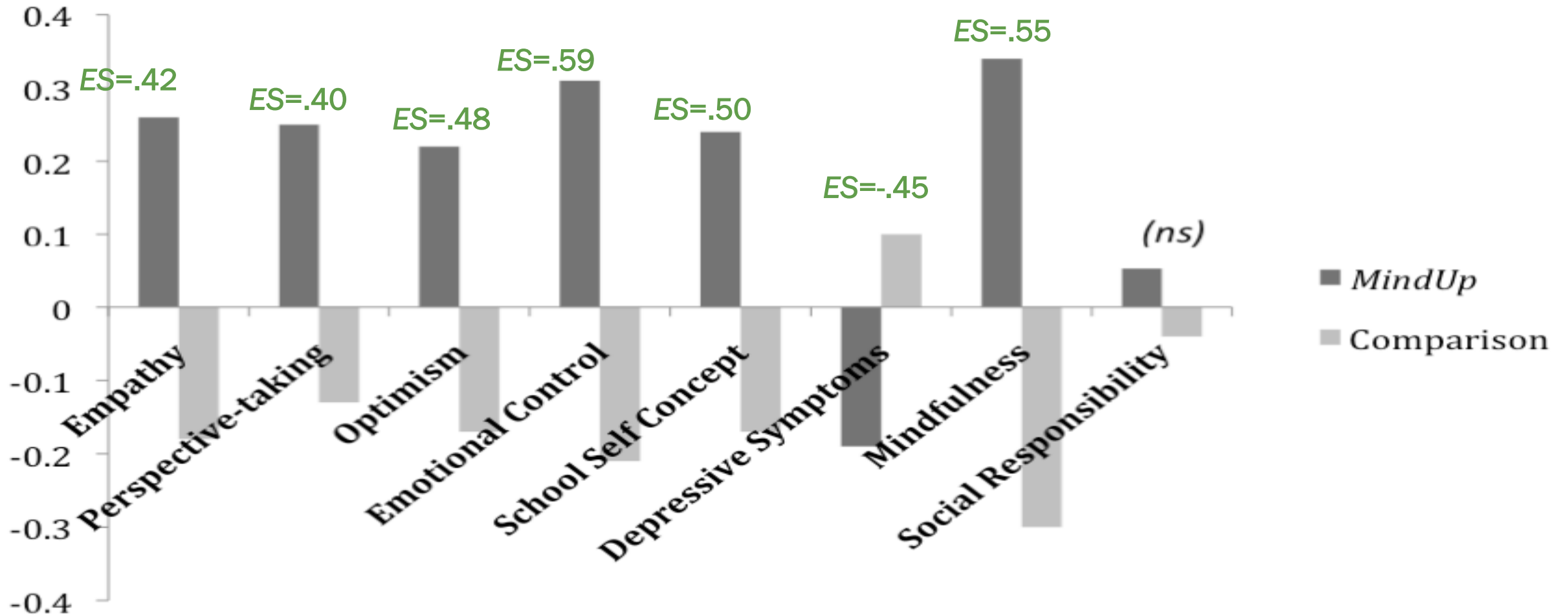


Diurnal Cortisol: Slope at Post-test



Child Self-Reports

Change Scores



Peer Behavioral Assessments

Change Scores



❖ Cohen's U_3 “improvement” index to reflect the average difference between the percentile rank of the intervention and control groups.

❖ 24% gain in positive social behaviors from participation in the *MindUp* program,

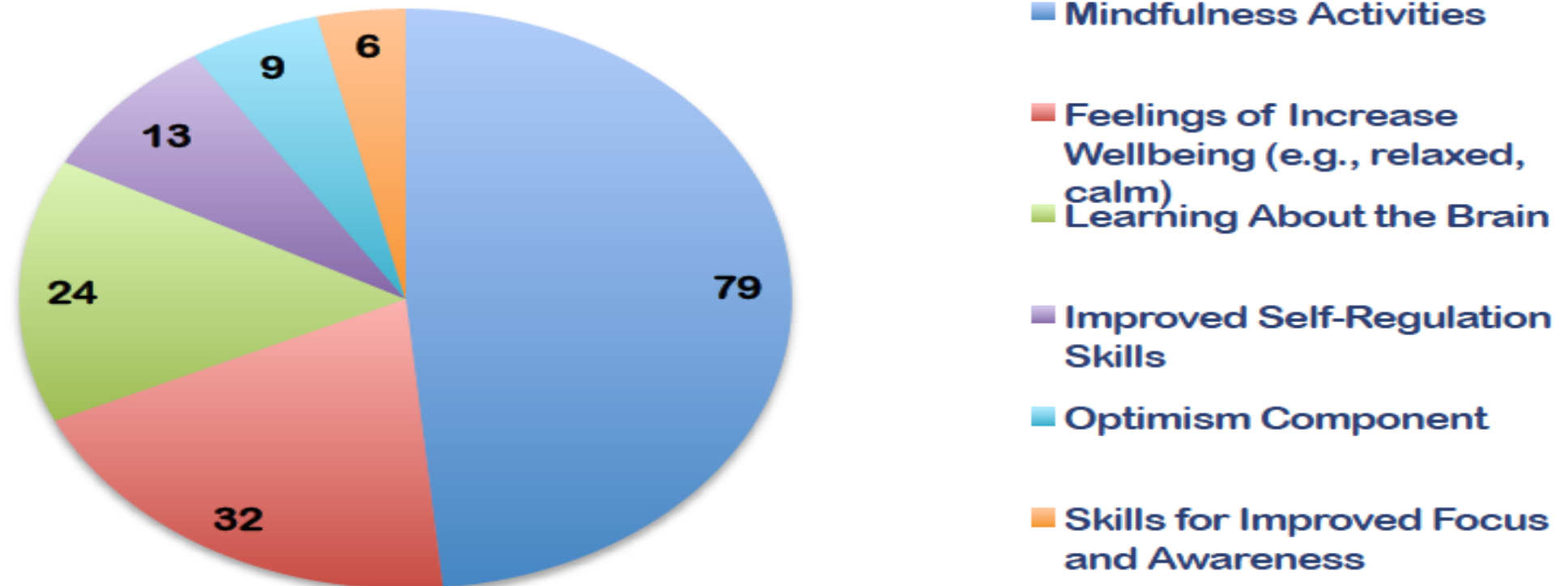
❖ 15% in math achievement,

❖ 20% in self-reported social-emotional competencies and skills,

❖ 24% in aggressive behaviors.

Students' Perceptions of MindUP

What did you like best about MindUP?



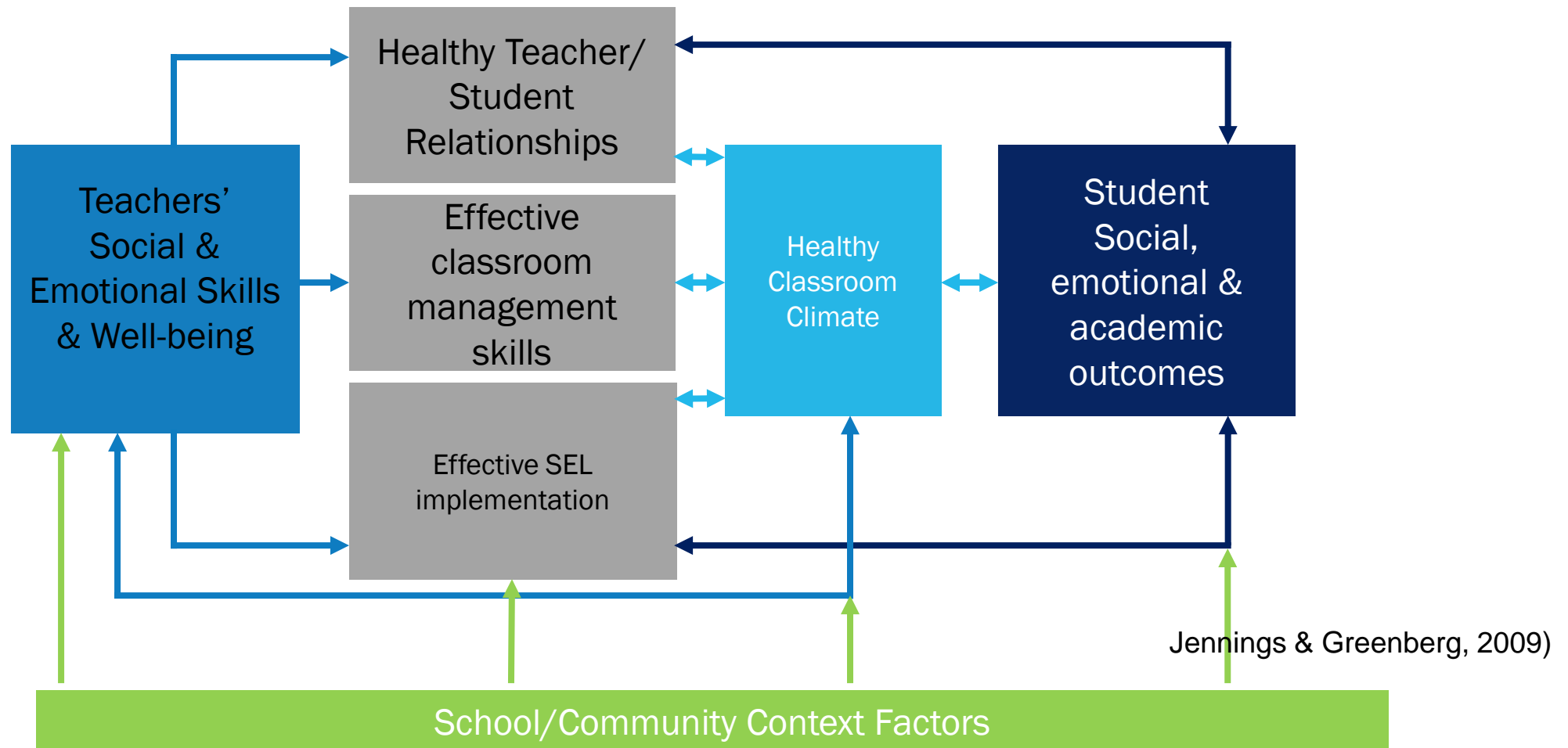
Note: Numbers represent the number of mentions across participants who provided a response to the ques

MINDUP^{*} Study 3

Schonert-Reichl, K. A., Roeser, R., Whitehead J., , Kitil, M. J. & Stewart-Lawlor, M., & Oberle, E. (in preparation).

THE PROSOCOCIAL CLASSROOM:

A Model of Teacher Social and Emotional Competence & Classroom & Child Outcomes



First...



Then...

Mindfulness Training and Reductions in Teacher Stress and Burnout: Results From Two Randomized, Waitlist-Control Field Trials

Robert W. Roeser
Portland State University

Kimberly A. Schonert-Reichl
University of British Columbia

Amishi Jha
University of Miami

Margaret Cullen
Berkeley, California

Linda Wallace and Rona Wilensky
Boulder, Colorado

Eva Oberle and Kimberly Thomson
University of British Columbia

Cynthia Taylor and Jessica Harrison
Portland State University

The effects of randomization to mindfulness training (MT) or to a waitlist-control condition on psychological and physiological indicators of teachers' occupational stress and burnout were examined in 2 field trials. The sample included 113 elementary and secondary school teachers (89% female) from Canada and the United States. Measures were collected at baseline, post-program, and 3-month follow-up; teachers were randomly assigned to condition after baseline assessment. Results showed that 87% of teachers completed the program and found it beneficial. Teachers randomized to MT showed greater mindfulness, focused attention and working memory capacity, and occupational self-compassion, as well as lower levels of occupational stress and burnout at post-program and follow-up, than did those in the control condition. No statistically significant differences due to MT were found for physiological measures of stress. Mediation analyses showed that group differences in mindfulness and self-compassion at post-program mediated reductions in stress and burnout as well as symptoms of anxiety and depression at follow-up. Implications for teaching and learning are discussed.

Keywords: mindfulness, self-compassion, teachers, stress, burnout

METHOD

SMART + MindUP

- Received 22 hour SMART Program
- Received one day MindUp Training
- Pretest and posttest survey

MindUP Only

- Received one day MindUp Training
- Pretest and posttest survey

BAU Control

- Social responsibility
- Pretest and posttest survey

PARTICIPANTS

- **Children**

- 331 4th to 7th grade children
- Mean age = 11.19 (*SD* = .92)
- 50% girls
- Participation rate (active consent): 91%

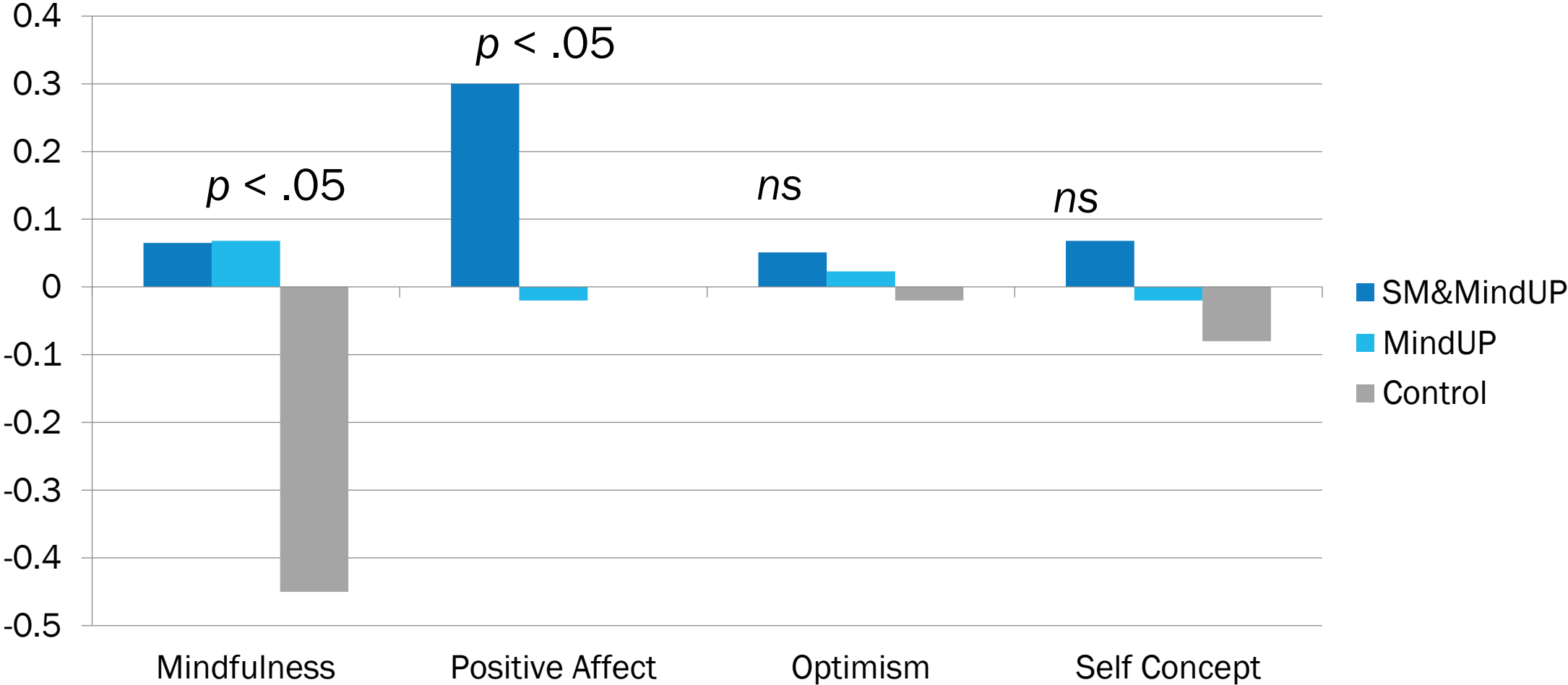
- **14 teachers**

- 11 female, 3 male
- 5 + years of teaching experience

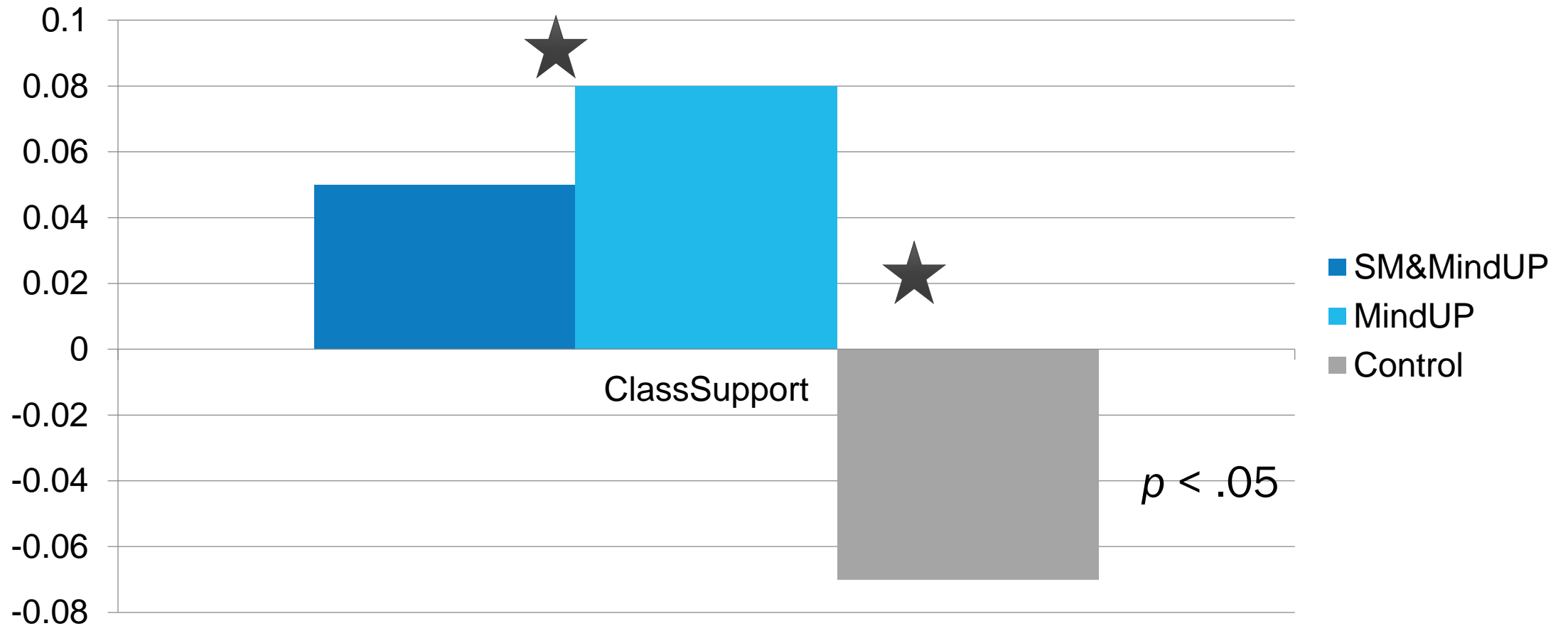
RESULTS

Student-Reports of Well-Being

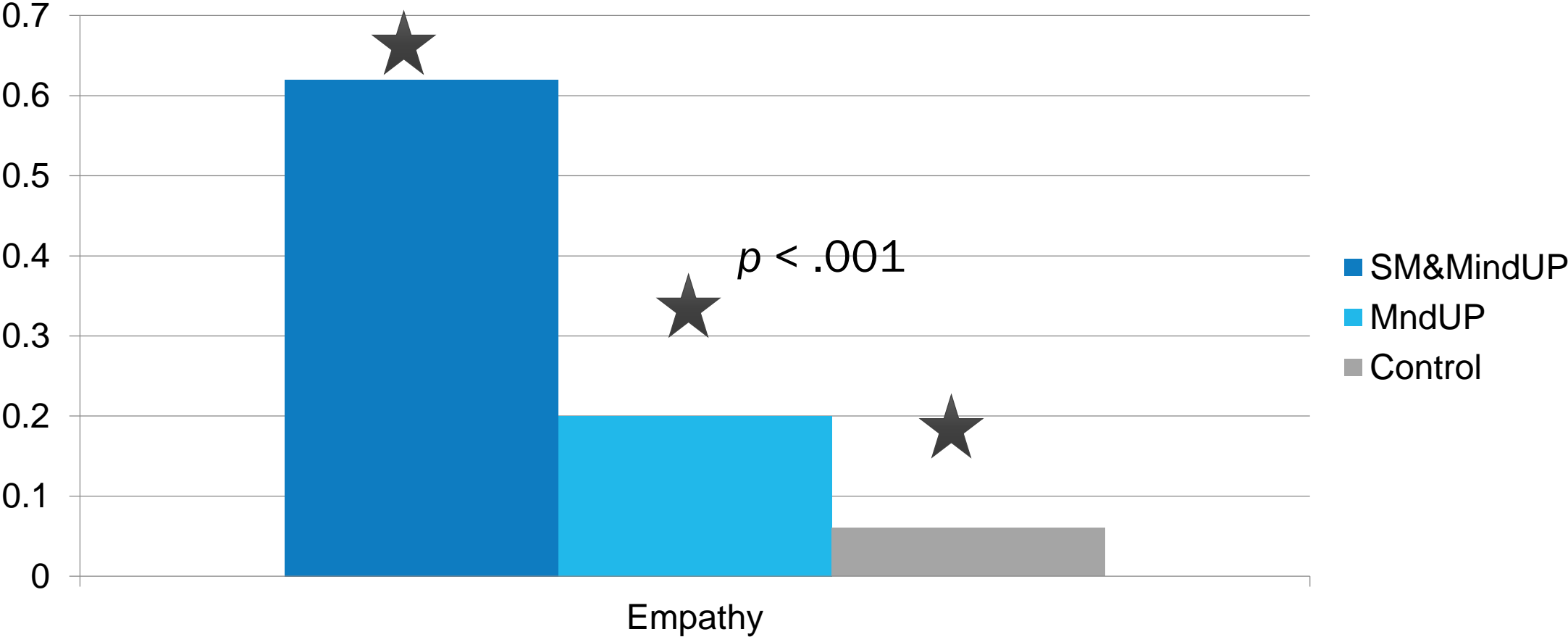
Change Scores



Student-Reports of Classroom Supportiveness

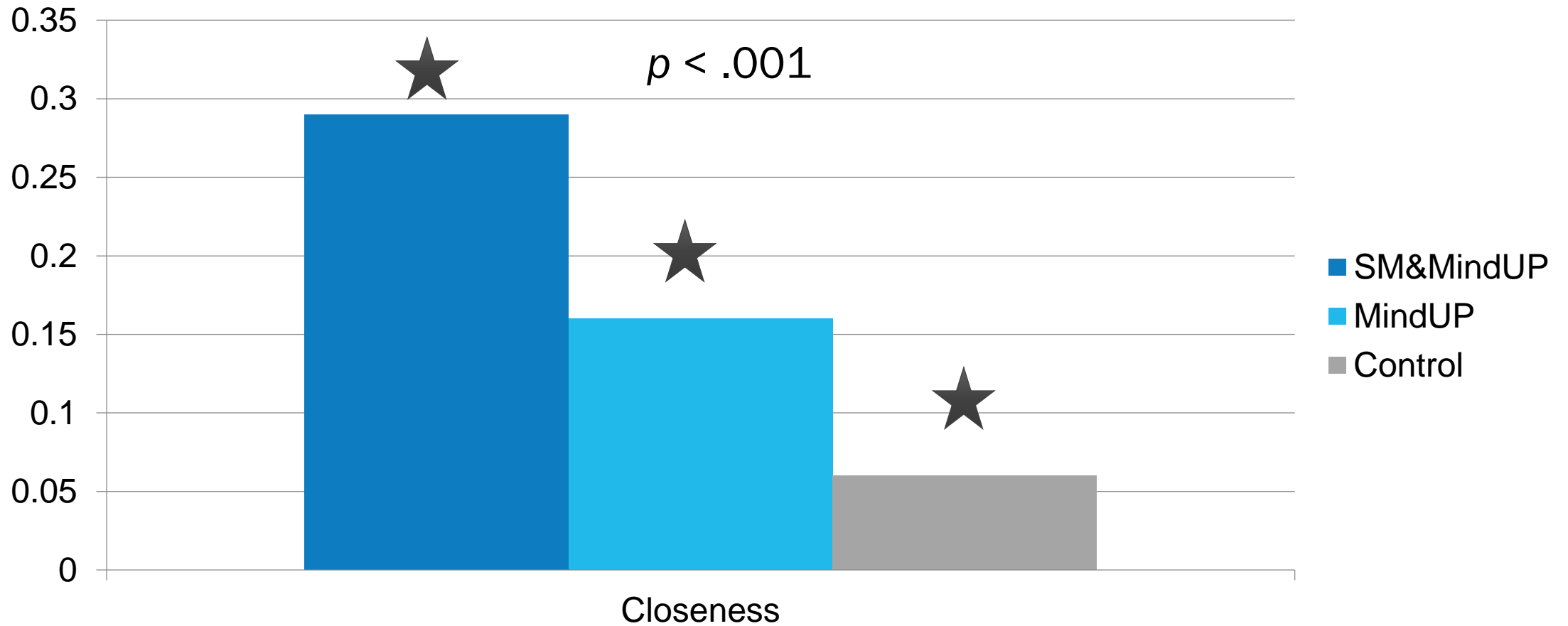


Teacher-Reports of Students' Empathy



Teacher-Child Closeness

Change Scores



DISCUSSION AND FUTURE DIRECTIONS

A grayscale photograph of four women sitting around a table in a meeting. They are looking at documents and talking. The image is semi-transparent, serving as a background for the text.

Discussion

The findings suggest the “value-added” of a combined program – one in which teachers receive a program that supports their own well-being, and then implement a mindfulness-based SEL program for students.

There may be different pathways to teacher training in relation to MindUP implementation.

Future Directions



- More research is needed with rigorous empirical designs (e.g., active control groups) and takes a systems approach.
- Increased focus on cultivating kindness, empathy, and compassion as outcomes
- Translational research that brings together researchers across several disciplines to work collaboratively in order to make new discoveries that ultimately lead to more effective preventions and interventions.

MIND THE GAP PROJECT

Roberts Creek Community School



TEACHER
SEL TRAINING
PROGRAMS



FAMILY
SEL TRAINING
PROGRAMS



STUDENT
SEL TRAINING
PROGRAMS

DOCUMENTATION & DATA GATHERING

THANKS TO . . .

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Thank You!

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