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# Keeping Pace with the Mindfulness Expansion: A report on the first national VA facilitator training

July 16, 2020

**PIRE Team:**  
**Kathy Atwood, ScD**  
**Steve Shamblen, PhD**



**Pacific Institute**  
FOR RESEARCH AND EVALUATION

**VA CALM Team:**  
**Greg Serpa, PhD**

**VA**



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Office of Patient Centered Care and  
Cultural Transformation



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# Grounding Practice

## Resting in Community



- Veterans Health Administration (VHA) is the largest integrated healthcare system in the US
- Approximately 170 Medical Centers and 1200 Outpatient Clinics
- 340,000 providers with 120,000 yearly trainees in more than 40 disciplines

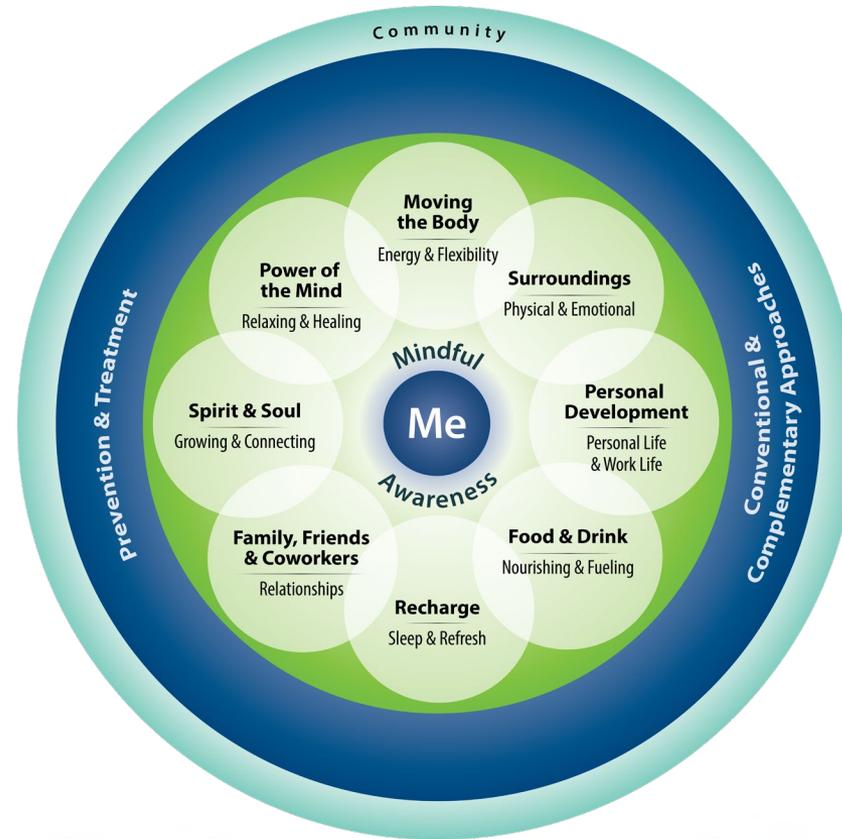


- The rapid expansion of Mindfulness Based Interventions has been called an “emerging phenomena”
- Mindfulness Evidence Map created to help guide policy and clinical decision making (Hemphil et al. 2014)
- Mindfulness a core component to VHA’s Whole Health transformation
- Top strategic goal of providing personalized, proactive and patient-centered healthcare

# The Circle of Health



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## Poll Question One

Do you have a personal mindfulness practice?

- a. I do not have a practice
- b. I try to be mindful on occasion but have no regular practice
- c. My practice is semi-regular or off-and-on
- d. I have a near daily mindfulness practice
- e. I have a daily practice with silent retreat experience



## Poll Question Two

If you are a clinician, have you ever taught mindfulness?

- a. Never
- b. Only as a component of another intervention (ie ACT)
- c. I teach mindfulness regularly
- d. I teach an MBI (ie MBSR or MBCT)



## Poll Question Three

If you are teaching mindfulness in a clinical setting, have you had formal mindfulness teacher training?

- a. No formal teacher training
- b. Formal training as part of another intervention (ie ACT, DBT)
- c. Formal training and qualified/certified teacher in an MBI (ie MBSR, MSC)
- d. VA CALM graduate or current participant
- e. Formal teacher training through another institution

# Who is teaching mindfulness?



- Generational shift in the training and personal qualities of mindfulness facilitators
- Facilitators bring a distinct set of skills and capacities
- Facilitators also have interference in clinical stance and technique
- Barriers and new risks: McMindfulness or decontextualizing mindfulness into a stripped down secular and commercialized practice



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# 2019 CALM: Mindfulness Facilitator Training Course Evaluation

**VA CALM Team:**  
**Greg Serpa, PhD**  
**Christiane Wolfe, MD, PhD**  
**Linda Good**

**PIRE Team:**  
**Kathy Atwood, ScD**  
**Aree Sangpukdee, EdD**  
**Steve Shamblen, PhD**

**VA**

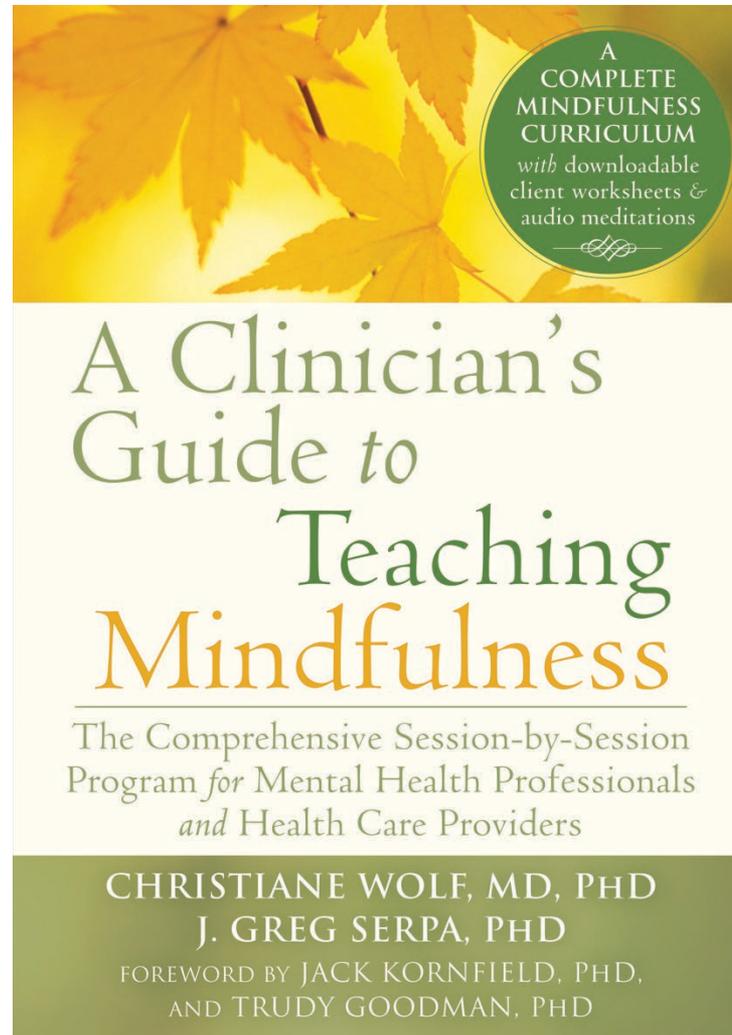


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## The CALM: Mindfulness Facilitator Training National Program

- **12 month train-the-trainer course - builds clinician skills to teach mindfulness and compassion to Veterans.**
- **3 Phases:**
  - **Phase I:** 9-week Mindfulness-Based Stress Reduction (MBSR) course that uses synchronous video teleconferencing;
  - **Phase II:** 12 to 16 weeks of weekly calls to support daily meditation practice and learn mindfulness theory;
  - **Phase III:** 6-month facilitator training - teaches foundational skills for leading a mindfulness-based group program. Distance and in-person learning formats with two face-to-face trainings (2 days in length).
- **Sample: Two cohorts of participants went through the course.**
  - All participants invited to complete Phase I and II (pooled n=106)
  - A subsample selected to participate in Phase III (pooled n=73).



## Two evaluation designs used:

- ***A Waitlist Control Design*** - impacts of Phase I.
  - Cohort 2, (not yet begun the course) served as waitlist comparison condition for Cohort 1 (Study 1).
- ***An Intervention Group Only Design*** - impacts of Phase II and III (Study 2 and 3).

## Did participants report...

- Q1: Change in **Self-Efficacy** and **Competencies** in Mindful Awareness Instructional Skills?
- Q2: Greater **Use of Mindfulness Strategies** during clinical encounters?
- Q3: Reduction in **Stress** and **Burnout**?
- Q4: Increases in **Self-Compassion** and **Mindful Awareness**?
- Q5: What **feedback** did participants have for each Phase?
- Q6: In a subgroup analysis of Phase III participants, was there a difference in **Instructor Observation of Competencies** in Mindful Awareness Instructional Skills vs. **Participant Self-Report of Competencies**?



- 10 measures – 4 validated, 2 modified from validated measures and 4 developed for the course.
- Internal consistency reliabilities in the acceptable range (alpha  $>.73$ ).
- 2 open-ended questions to gain participant feedback.



<b>Domain</b>	<b>Citation and # of Items</b>
<b>Mindful Awareness</b>	Walach et al., Freiburg Mindfulness Inventory, 2006 (14 items)
<b>Burnout</b>	Maslach, 1996 (23 items)
<b>Perceived Stress</b>	Cohen et al., 1983 (10 items)
<b>Self-Compassion</b>	Raes et al., 2011 (12 items)
<b>Self-reported Competency - teach mindfulness-based courses in One-on-One Sessions</b>	Adapted from Crane et al., 2012 observational tool (4 items)
<b>Self-reported Competency- teach mindfulness-based courses in Group Sessions</b>	Adapted from Crane et al., 2012 observational tool (6 items)

# Measures Developed for Course



<b>Domain</b>	<b>Citation and # of Items</b>
<b>Satisfaction/ Effectiveness/Utility of the training</b>	Developed for course (9 items)
<b>Self-Efficacy to teach Mindfulness Meditation</b>	Developed for course (6 items)
<b>Frequency of Use of Mindful Awareness during One-on-One Sessions</b>	Developed for course (1 item)
<b>Frequency of Use of Mindful Awareness during Group Sessions</b>	Developed for course (1 item)



## **Study 1: Changes in Outcomes from Phase I** **(Waitlist Control Design)**

- Independent groups t-test, comparing the difference scores (post – pre) of the intervention and comparison groups.
- A Heckman (1976) selectivity analysis - to mitigate biases due to non-random assignment to intervention and comparison condition

## **Study 2: Assessed Changes in Outcomes from Baseline to Phase II**

### **(Intervention Group Only Design)**

- A Heckman selectivity bias analysis - to examine and statistically correct for biases due to study attrition.
- Random Intercept Regression - examine impacts of Phase II on outcomes, adjusting for variability in the dependent measures due to repeated measurements.



## Study 3: Assessed Changes in Outcomes from Baseline to Phase III

### (Intervention Group Only Design)

- An attrition analysis conducted using Heckman's - none found.
- Heckman used to assess and control for selectivity in adjusted models.
- An ordinary least squares regression - dependent variable was the difference between Pre-test and Post-Phase III to assess impacts on outcomes.

### Qualitative Analysis

- Open-ended responses - Manual using a coding and thematic analysis approach (Miles & Huberman, 1987).



- Participants completed baseline and immediate post course surveys (1-2 wks. after course completion).
- **No follow-up survey due to timeframe of contract**

Survey	Cohort 1 (Sept. '18 - Sept. '19 )	Cohort 2 (Jan.'19 - Nov. '19)
Baseline	100% (n=45/45)	100% (n=61/61)
Post-Phase I	100% (n=45/45)	Wait list 95% (n=58/61)
Post-Phase II	98% (n=41/42)	100% (56/56)
Post-Phase III	98% (n=34/35)	100% (39/39)

## Demographics Pooled Sample:

- Mean Age: **44**
- Mean VA Tenure: **8 years**
- **13%** Veterans
- **71%** Female
- **80% Caucasian**

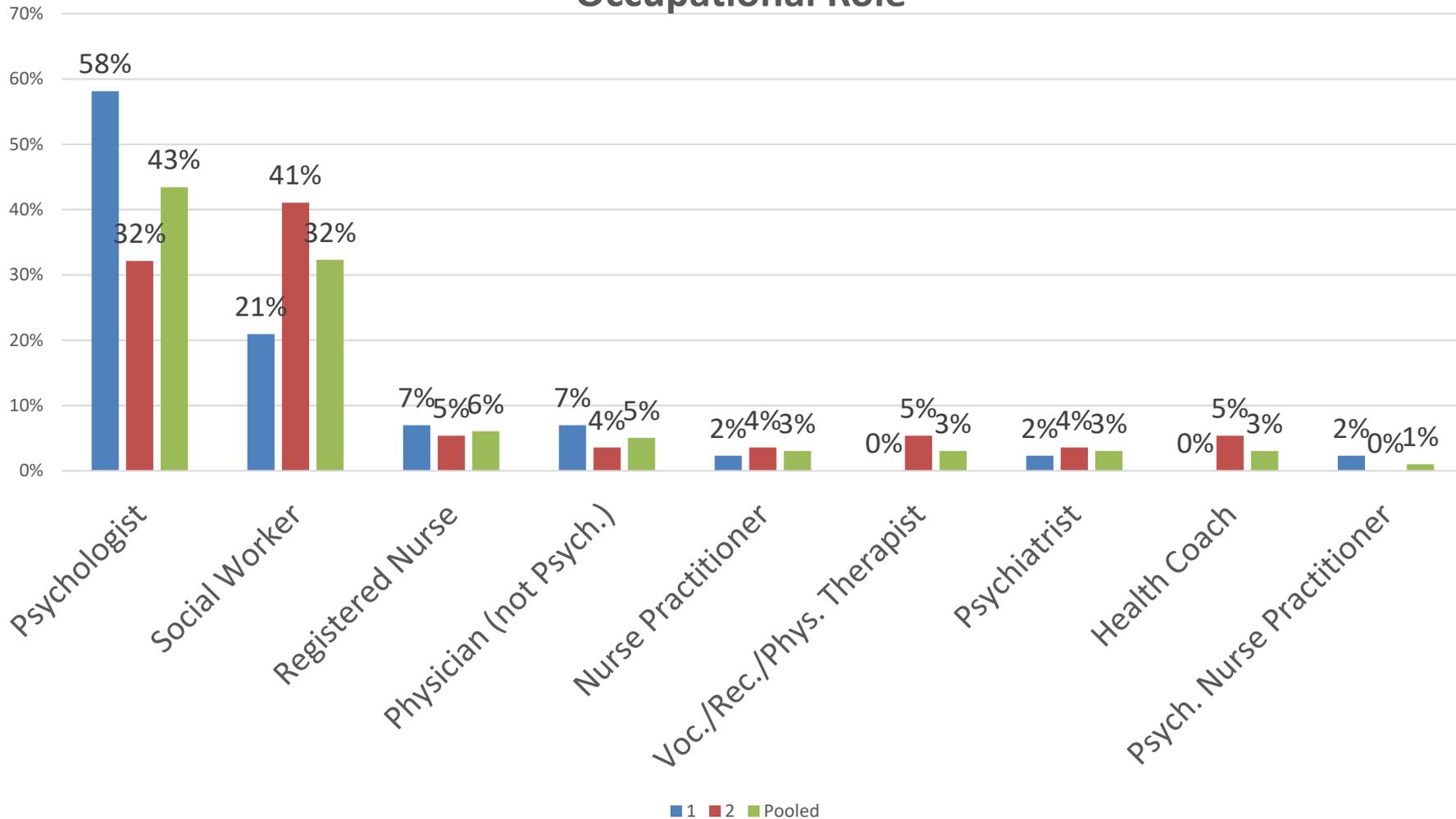
## Occupational Role

- More psychologists in Cohort 1 (58% vs. 32%)
- More social workers in Cohort 2 (21% vs. 41%)
- All other roles are fairly evenly distributed between the two cohorts.

# Participants- Occupational Role



## Occupational Role



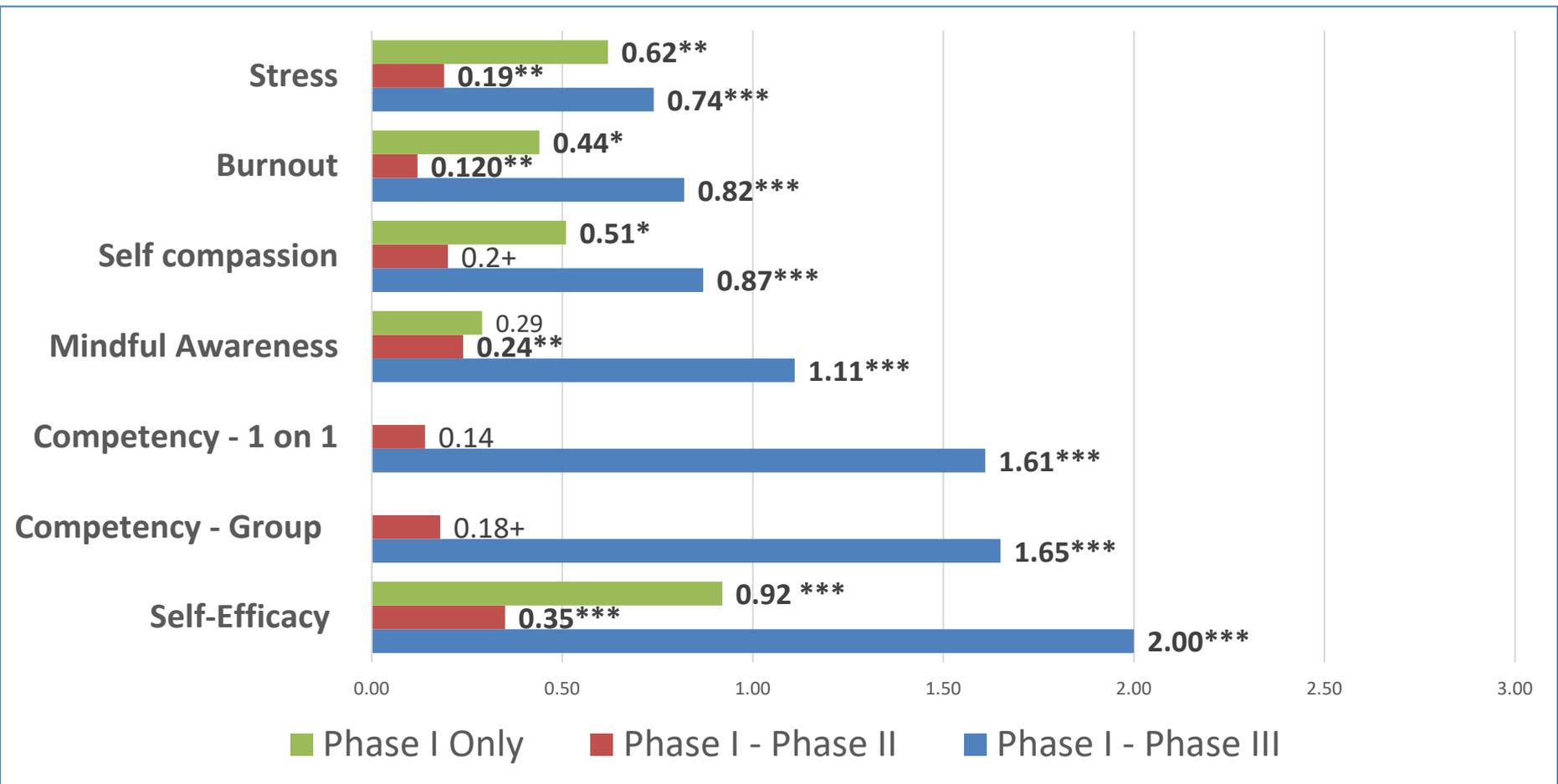


- 69% engaged in regular Mindful Meditation practices at baseline.
- 33% completed an 8-week MBSR or MBCT program
- 12% completed a formal Mindfulness Teacher Program prior to the CALM training.

# Outcomes Effect Sizes - Phase I Only, Phase I – II, and Phase I – III



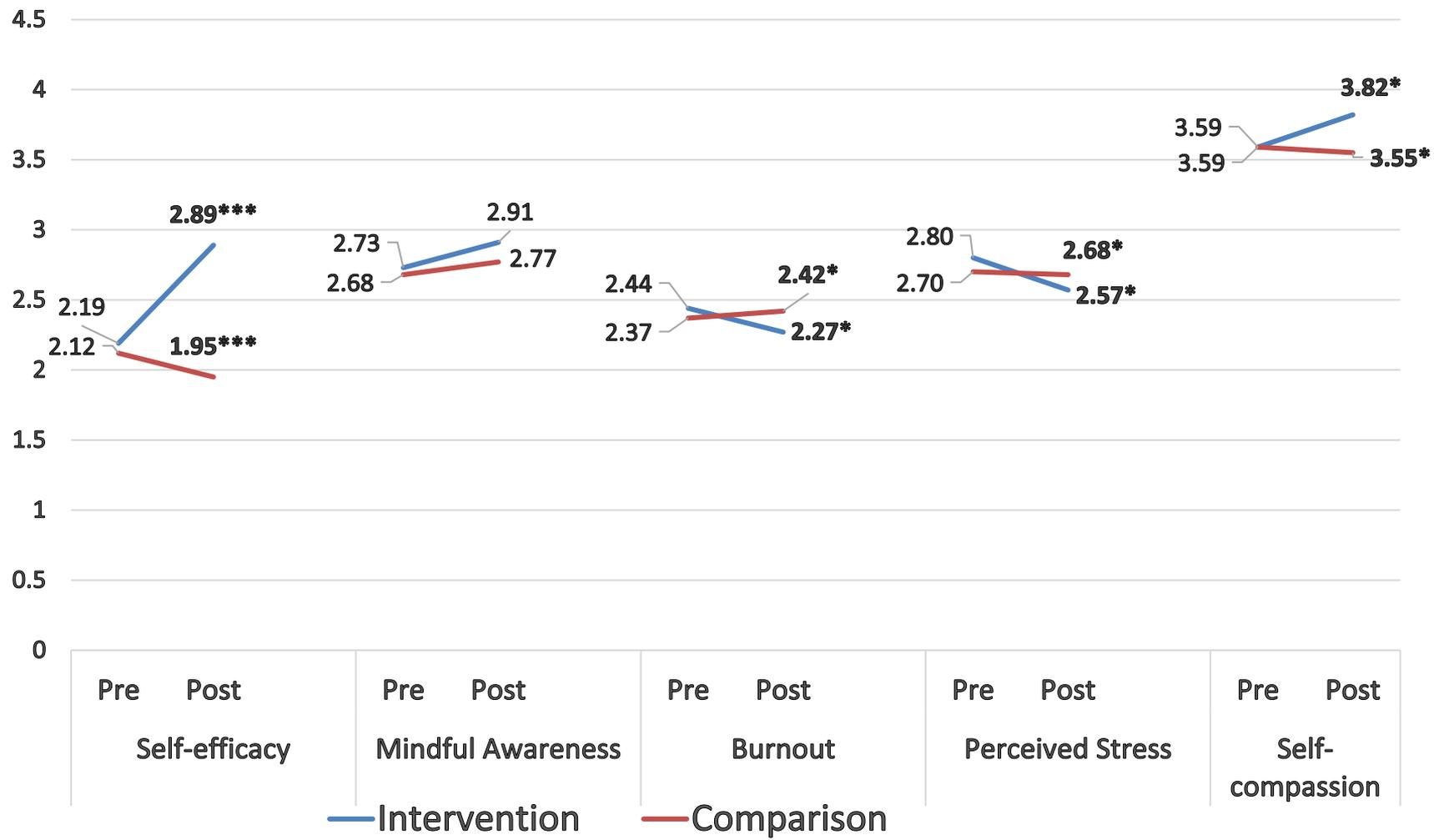
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**Note:** (1) Bolded Means indicate that the pre- and post-test means are significantly different using a random intercept regression adjusting for attrition + (p<.10), \*(p<.05), \*\*(p<.01), \*\*\*(p<.001). (2) Competencies (one on one and group) were not asked at the end of Phase I. (3) Phase III participants are a selected sample of baseline course participants and Phase III findings are generalizable only to these participants.

- **Medium to Large ( $d = .44$  to  $-.92$ ) Effect sizes (relative to the waitlist comparison group).**
- **Largest Effects - Self-Efficacy ( $d = .92$ )**
- **Significant effects found for:**
  - Self-Efficacy to lead Mindful Meditation ( $d = .92$ )
  - Perceived Stress ( $d = .62$ )
  - Self-Compassion ( $d = .51$ )
  - Burnout ( $d = .44$ )
- **Mindful Awareness Engagement – No significant change (high engagement at baseline).**

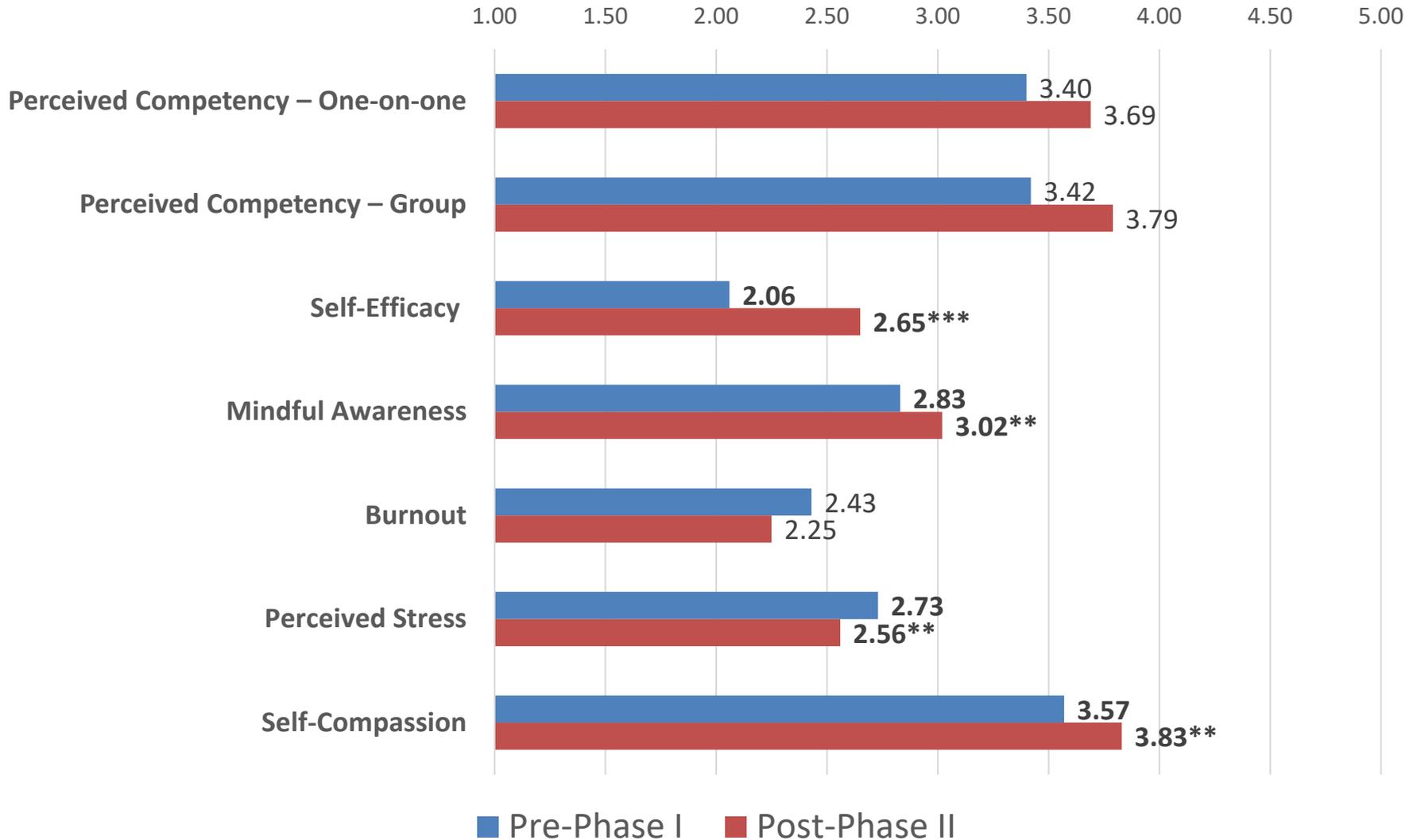
# Phase I: Intervention vs. Comparison – Waitlist Design





- **Slightly reduced effects compared to Phase I**
- **Small effect sizes ( $d = -.19$  to  $.35$ ) for outcomes with significant change**
- **Largest Effects - Self-Efficacy ( $d = .35$ )**
- **Significant effects were found for:**
  - Self-Efficacy ( $d = .35$ )
  - Mindful Awareness ( $d = .24$ )
  - Self-Compassion ( $d = .20$ )
  - Perceived Stress ( $d = -.19$ )
- **Marginally significant shift in Burnout and Perceived Competency in group sessions ( $p < .10$ ).**

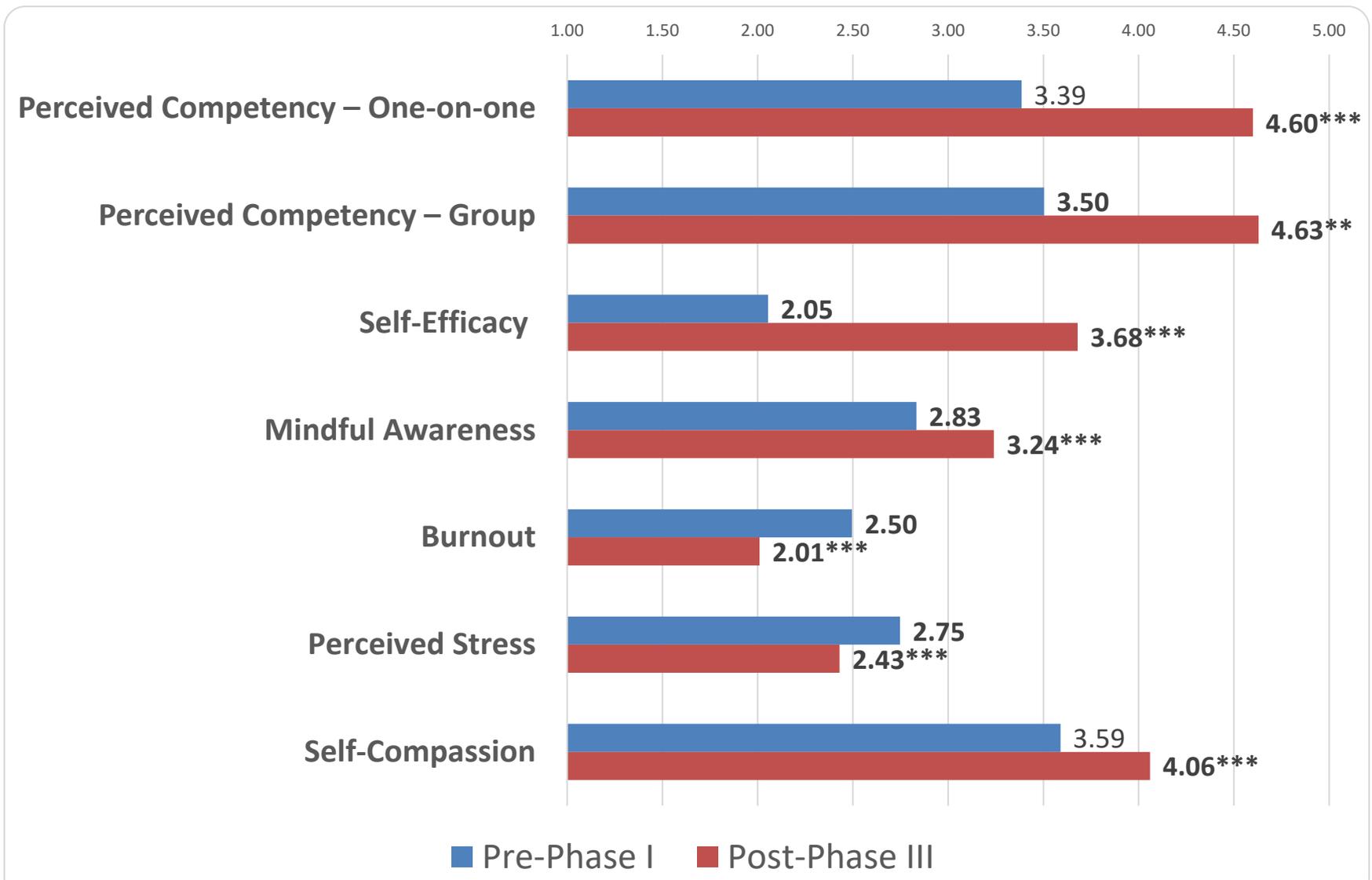
# Phase II Findings (Intervention Group Only)





- **Significant changes in key outcomes. Effect sizes Moderate to High (d range: 0.74 - 2.00)**
- **Effects surpassed Phase I and II.**
- **Largest Effect - Self-Efficacy (d = 2.0)**
- **Significant effects found for:**
  - **Self-Efficacy (d = 2.00)**
  - **Perceived Competency in group sessions (d = 1.65)**
  - **Perceived Competency in one-on-one sessions (d = 1.61)**
  - **Mindful Awareness (d = 1.11)**
  - **Self-Compassion (d = .87)**
  - **Burnout (d = .82)**
  - **Perceived Stress (d = .74).**

# Phase III Findings (Intervention Only)





## Group Sessions

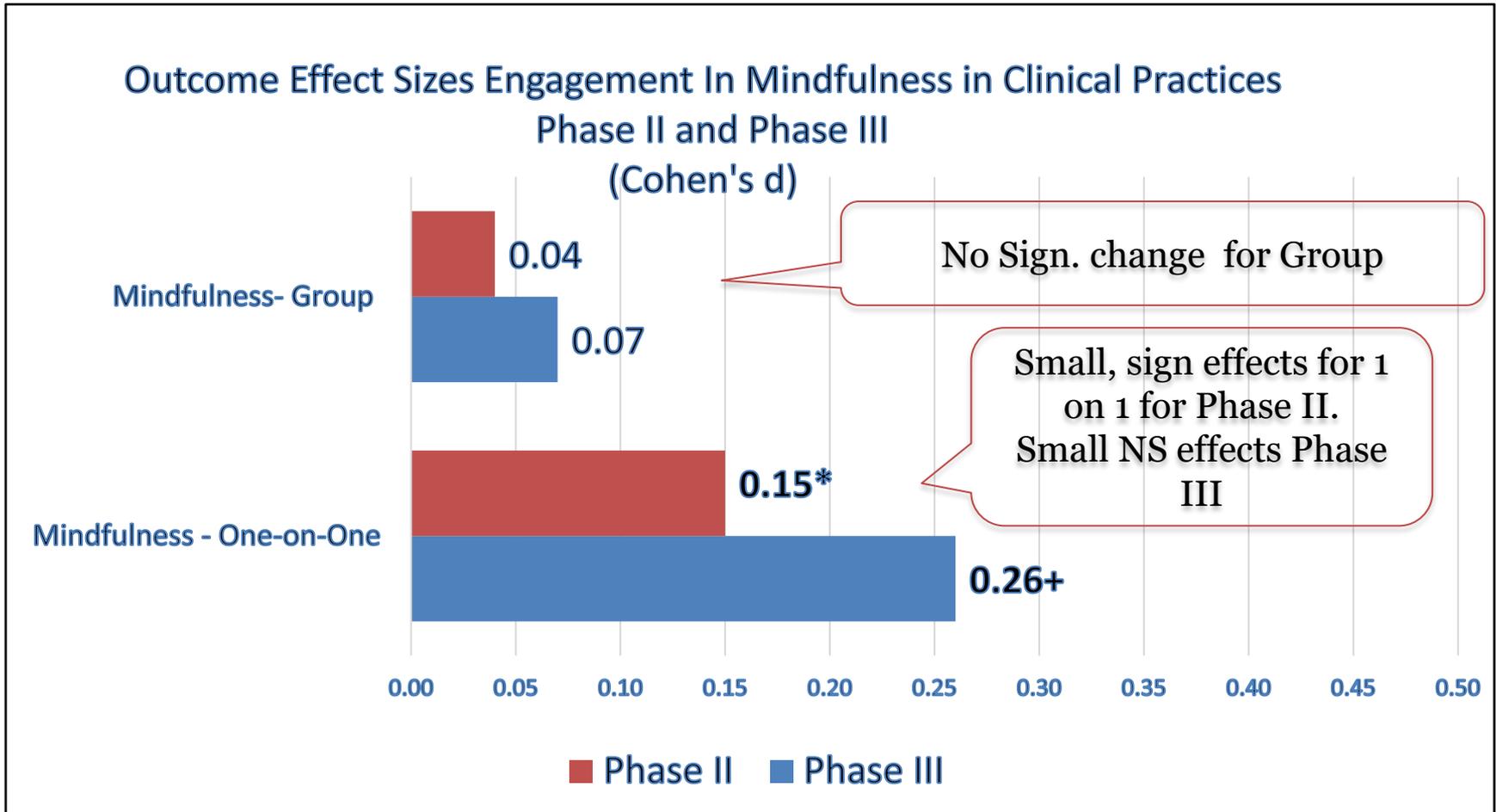
- Mindful Awareness incorporated in **approximately 3/4** of group sessions at baseline.
- **No significant increases found** after Phase II or after Phase III.
- Likely due to baseline ceiling effects.



## One-on-One Sessions

- Baseline – 42%
- Phase II - 50%
- After Phase III - 47%
- **Small, significant increase after Phase II**  
( $d=.15$ ,  $p=.042$ )
- **Marginal effect after Phase III** ( $d=.26$ ,  $p<.051$ ).

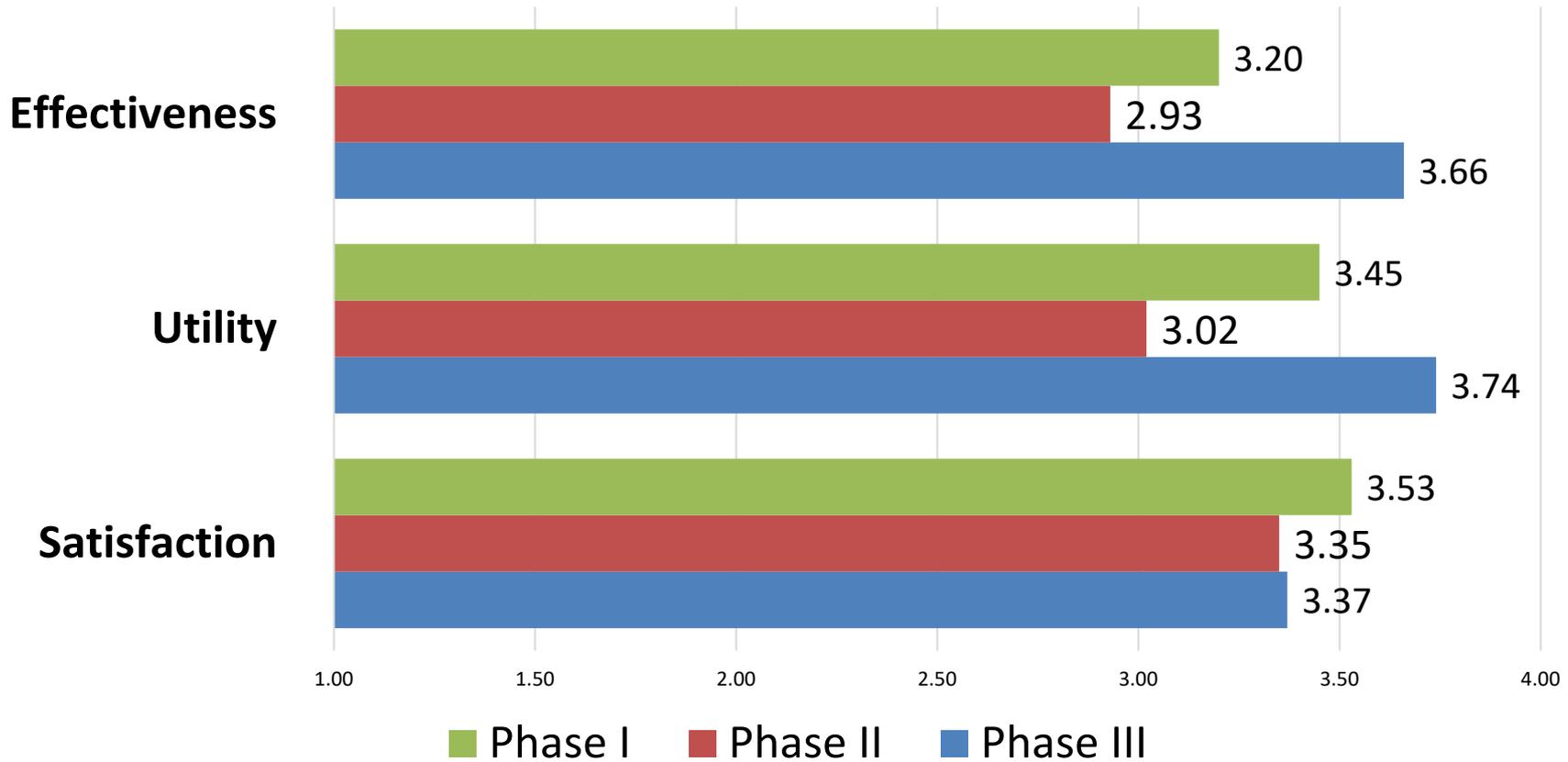
# Mindfulness During One-on-One and Group Sessions



**Note:** Bolded Means indicate that the pre- and post-test means are significantly different using a random intercept regression adjusting for selectivity biases +(p<.10), \*(p<.05), \*\*(p<.01), \*\*\*(p<.001).



## Means Scores on Satisfaction, Effectiveness, and Utility (Phase I, Phase II and Phase III)



## Self-Report vs. Instructor Observation Ratings





## Instrument Adaptation: Mindfulness Instruction Competencies

**Crane Observational Assessment tool** - Adapted for inclusion in the surveys as a self-report competency measure

Competency Domains	One-on-One	Group
Relational Skills	X	X
<b>Embodiment of Mindfulness</b>	X	X
<b>Guiding Mindfulness Practices</b>	X	X
Conveying Mindfulness Themes through Mindful Inquiry and Didactic Teaching	X	X
Management of Group Learning Environments		X
Coverage, Pacing and Organization of a mindfulness session curriculum.		X

Cohort 2 Phase III participants were:

- 10 min observation by instructors during dyadic practice sessions
- Same Observation - Video-recorded
- Live Observations & Video Files scored separately by instructors
- Interrater compared for 2 Domains -Embodiment & Guiding Practice



## Inter-Rater Agreement - Sessions Rated by Both Instructors (n=8)

	Embodiment	Guide
<b>Rater 1 Mean</b>	3.63	3.88
<b>Rater 1 SD</b>	.92	.83
<b>Rater 2 Mean</b>	3.75	3.63
<b>Rater 2 SD</b>	.46	.74
<b>Difference</b>		
<b>t</b>	-.42	1.53
<b>p</b>	.685	.170
<b>d</b>	-.15	.54
<b>Pearson Correlation</b>		
<b>r</b>	.42	.83
<b>p</b>	.299	.010
<b>Intraclass Correlation</b>		
<b>r</b>	.34	.83
<b>F</b>	2.03	10.67
<b>p</b>	.186	.003

Demonstrates no sig. difference in scores between instructors for either construct

Sig. Correlation in scores for Guiding but not Embodiment

More conservative test of Correlation -- Guiding scores sig. correlated; Embodiment not sig. correlated



## Findings suggest:

- Instructor observations provided very similar ratings on Guiding Mindfulness
- Instructors observations may need to hone in on a similar operational definition of Embodiment of Mindfulness.



## Criterion Validity Assessment - Self Report vs. Instructors Observation

- The assessment was limited to two key domains of the Crane Assessment during one-on-one encounters:
  - (1) Embodiment of Mindfulness and
  - (2) Guiding Mindfulness Practice
- Participant Self-Report Competency compared to Expert Observation to determine if the Self-Report measure is a valid assessment of competency (n=25).



## Analysis Approach:

- Compared scores from instructors observation to self-report ratings where both data points were available (n=25)
- **Paired t-tests and Pearson Correlation Coefficients** were used to examine similarities and differences between self report and instructor observation.
- A two-way random effects model was used to calculate the **Intraclass Correlation Coefficient**.



- Self-report asked respondents “...*think back to most recent one-on-one session where mindful awareness practices were integrated with Veterans*” when rating the skills
- The instructors rated the skills during observation of a specific one-on-one mindfulness interaction of dyadic practices
- These two measures are not reporting on the exact same encounter introducing measurement error.

# Phase III Subgroup Analysis: Comparison of Self-Report to Instructor Observation Ratings



## Consistency and Differences between Observer Ratings and Self-Reports (n=25)

•

	Embodiment	Guide
Observation Mean	4.04	4.04
Observation SD	.98	1.10
Self-Report Mean	4.76	4.64
Self-Report SD	.97	.95
<b>Difference</b>		
t	-2.82	-2.45
p	.009	.022
d	-.56	-.49
<b>Pearson Correlation</b>		
r	.14	.29
p	.497	.155
<b>Intraclass Correlation</b>		
$\rho$	.14	.29
F	1.33	1.82
p	.244	.075

Participants self-ratings significantly more favorable than instructor ratings on both domains

Paired t test: Sig. differences found between instructor and self-report ratings on both domains

No significant correlation between instructor and self-report ratings

No significant correlation between instructor and self-report ratings



## Findings suggest:

- **Self-reports ratings of competencies may not be valid measures for the operational definitions of these domains as applied by expert judges.**



## Question 1: What might you tell a colleague considering taking a future program?

Asked at all 3 Phases - 4 Themes emerged

- Theme 1 – Highly Recommend to colleagues
- Theme 2 – Personal and Professional Benefits
- Theme 3 – Commitment Essential for Success of the Training
- Theme 4 – Excellence of Facilitators
- Theme 5 – Recommendations

# Theme 2. Personal and Professional Impacts



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*Phase I: "This is the only training I've ever taken for work that has been both a professional AND a personal game-changer! ...my esteem for the facilitators as well as a bit of pressure from this being for work, led me to really dig in and create my own practice. It's really been life-altering."*

*Phase II. "This training has been important in helping me cope with my duties. I have experienced a sense of joy that has been out of my life for some time. Even with family issues, the skills taught have been beneficial in helping me to cope."*

*Phase III. "It has made me a better person, reduced my feelings of burn-out, and improved my skills as a clinician. It has given me a tool to use in my own life and to teach my Veterans."*

# Theme 3. Commitment Required for Successful Participation



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*Phase I: “Be prepared to jump in the deep end with starting a personal practice. ...it might be better to start out with a more achievable goal or have people start slower on their own before the training begins.”*

*Phase II: “Making time for personal practice can be difficult...but it is worth the effort. Learning to sit with feelings that are difficult is tough, but so beneficial personally and to help others professionally.”*

*Phase III: “It is a deep, challenging process that is so worth it. It requires doing a lot of personal work and the in-person retreats can be emotionally draining. You must be open to transforming the fundamental ways you relate to yourself, others, and life.”*

# Theme 4. Excellence of Facilitators



*Phase I: “Both instructors have warm personalities that help you feel connected with what they are teaching. They also believe in what they are teaching and are genuinely interested in helping their students to better understand the principles of mindfulness and how to have a successful mindfulness practice.”*

*Phase II: “Greg and Christiane are superb teachers, facilitators, and human beings who combine tremendous wisdom, compassion, accessibility, and great generosity of spirit.”*

*Phase III: “Greg and Christiane modeled authenticity, generosity, compassion, curiosity, humor, wisdom, patience, and were enormously and consistently encouraging of our growth as mindfulness facilitators.”*

# Theme 5. Recommendations for Training Improvement



**Few participants (6% to 15% of responses) commented on course improvements, most related to the delivery methods of the training.**

## **Phase I:**

- Video was not the most effective medium for Phase I delivery to promote connection among participants.

## **Phase II:**

- Lengthening weekly calls; use video calls; providing outlines of content discussed.
- More time on teaching content with expectation that participants meditated on their own.
- More time to discuss/encourage personal practice.

## **Phase III:**

- VA provide scheduled time for practice sessions among dyads before leaving the training.
- Lengthening of course components.
- Provide opportunities to further develop their inquiry skills and address challenges of integrating with existing therapy skills.

# Illustrative Quotes - Recommendations for Training Improvement



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*Phase I: "I had some difficulty feeling connected with several sites and through video-though the instructors are great in their efforts to remedy that. I would encourage a colleague to assure their space was conducive to the various mindfulness and yoga exercises - some of the spaces on our end were difficult to practice in."*

*Phase II: "The weekly calls were useful, but I think having a couple of longer conference calls would have been useful to maintain a sense of group cohesion."*

*"Would be nice to have outline of didactic content to better integrate personally - and for future teaching by participants."*

*Phase III: "They [monthly calls] were valuable, but too rushed and too much to cover--You could increase the content of your teaching if they occurred more often."*

*"The only thing I wish we had more of, was developing our inquiry skills and making sure we avoid interference from our therapy skills. We talked about it but did not have a chance to practice at all."*



## Question 2: How has the VA CALM: Mindfulness Facilitator Training to date impacted you personally and professionally?

- **Only asked at the end of Phase II and III.**
- **Similar themes:**
  - Personal and Professional Growth
  - Gratitude for the Extraordinary Training and Excellent Facilitators

# Theme 1. Personal and Professional Growth



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*Phase II: “Their [the teachers’] guidance has significantly increased my confidence in sharing mindfulness interventions with Veterans, and helped my personal and relational wellbeing as well - they have inspired me to make this practice a component of who I am.”*

*Phase III. “The VA CALM training has been influential in enhancing my self-care through personal practice and deepening mindfulness understanding. It has allowed me... to hold more space for unpleasantness/stress without rapid burnout/fatigue. I do not allow stressors to overpower me nor do I allow critical self-critique to dictate my work and life.”*

# Theme 2. Gratitude for Extraordinary Training and Facilitators



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*Phase II: "It's been so heartening to see high quality evidence-based mindfulness and Buddhist psychology embraced by the VA in this way. I have also been greatly comforting to see the efforts that have been taken by Greg and Christiane to preserve the integrity of this practice in a setting like the VA."*

*Phase III: While in other trainings I may have walked away with a new skill, this was a much deeper ... is a bit difficult to describe. ...After being in the mental health field for 28 years and administration for the past 7... this training has provided much needed renewed energy for the work; and I am beyond grateful."*

*"I would like this to be available to all physicians so that they may alleviate the effects of overload and burnout and be more present and connected to their patients. ...Please expand this training."*



- ❖ **High Response Rate** - 97% to 100% across all 3 Phases
- ❖ **Validated Measures** four of the five key outcomes
- ❖ **Advanced Mindfulness Research** - 1<sup>st</sup> time adaptation of Crane's Mindfulness Training Competency measures for inclusion in self-report surveys
- ❖ **Use of a Waitlist design for Phase I**- provided more rigorous assess of Phase I effects

- ❖ **Self-report data** - may be influenced by socially desirable responding.
- ❖ **No follow-up Measure.**
- ❖ **Waitlist design was confounded slightly by time.**
- ❖ **Measurement Error of Validity Assessment.**  
Participants rated competencies of a past encounter. Instructors scored on specific encounter

# Summary of Findings



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- Effects sizes at the end of Phase I larger than Phase II.
- Phase III outcomes surpassed Phases I and II. (Cohen d range: 0.74-2.0).
- Outcomes with the largest effect sizes were Self-Efficacy and Perceived Competencies to guide Mindful Meditation in Group and One-on-One sessions.
- These effects were followed by increases in Mindful Awareness, reductions in Burnout and Stress and increases in Self-Compassion.

# Summary of Findings



- Qualitative findings underscored these feelings of self-efficacy and competency.
- Participants indicated that they now had the tools they needed to lead Veterans in mindfulness practice.
- Described a profound sense of calm and a deepening of their skills.
- Others described feeling less stress at work, being more present at home and feelings of greater self-compassion.

- **Findings align with previous published studies** on the impact of mindfulness-based instruction on health care practitioners.
- In a meta review of 81 studies of mindfulness-based courses targeting health care workers globally, studies on average had lower effect sizes
  - **Mindful Awareness** (d=.36 vs. **d=1.11**),
  - **Burnout** (d=.33 vs. **d=.82**)
  - **Stress** (d=.42 vs. **d=.74**),
  - Recognizing that research designs, duration of courses and survey measures varied (Lomas et al., 2018).



- Second national VA CALM training now in progress
- Doubled capacity to try to keep up with demand
- Approximately 5 fully qualified applicants for each available position



# Questions?

For information about VA CALM contact  
Greg Serpa at [John.Serpa@va.gov](mailto:John.Serpa@va.gov)