

Building Clinicians' Resilience during Challenging Times

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New England (HHS Region 1)

MHTTC

Mental Health Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration



HPRIIR

Health Promotion and Resiliency Intervention Research Program

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If you have questions after
this session, please e-mail:
newengland@mhttcnetwork.org.

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At the time of this presentation, Tom Coderre served as Acting Assistant Secretary for Mental Health and Substance Use at SAMHSA. The opinions expressed herein are the views of the speakers, and do not reflect the official position of the Department of Health and Human Services (DHHS), or SAMHSA. No official support or endorsement of DHHS, SAMHSA, for the opinions described in this presentation is intended or should be inferred.

This work is supported by grant #1H79SM081775 from the DHHS, SAMHSA.

The MHTTC Network uses affirming, respectful and recovery-oriented language in all activities. That language is:

STRENGTHS-BASED
AND HOPEFUL

INCLUSIVE AND
ACCEPTING OF
DIVERSE CULTURES,
GENDERS,
PERSPECTIVES,
AND EXPERIENCES

HEALING-CENTERED AND
TRAUMA-RESPONSIVE

INVITING TO INDIVIDUALS
PARTICIPATING IN THEIR
OWN JOURNEYS

PERSON-FIRST AND
FREE OF LABELS

NON-JUDGMENTAL AND
AVOIDING ASSUMPTIONS

RESPECTFUL, CLEAR
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CONSISTENT WITH
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FEBRUARY 2020

SUN	MON	TUE	WED	THU	FRI	SAT
						1
Murmurings of COVID-19 cases coming to Massachusetts			5	6	7	8
9	10	11	12	13	14	15
Psychiatry leadership meeting					21	22
23	24	25	26	27	28	29
Review reports of clinician struggles in China						

COVID-19 Pandemic: March 13, 2020



Resiliency Skills

RR
Mind-body
techniques

Cognitive
Behavior
Therapy

Positive
Psychology

Resiliency Processes

Stress Management

Adaptive
Strategies

RR Elicitation

Resiliency

Stress Management and Resiliency Training: SMART-3RP Program

Intake + 8 weekly sessions

1.5 hour sessions

Session	Session Content
1	Introducing Resiliency and the Relaxation Response <i>RR Practice:</i> Simple Breath Awareness
2	SMART-3RP and The Science of Mind-Body Medicine <i>RR Practice:</i> Single-pointed focus meditation and body awareness
3	The Relaxation Response and Recuperative sleep <i>RR Practice:</i> Body scan and the mini
4	Stress Awareness: Mindful Awareness and Social Support <i>RR Practice:</i> Mindful awareness and mindful body meditations
5	Mending Mind and Body: Thoughts and Movement <i>RR Practice:</i> Yoga, walking meditation
6	Creating an Adaptive Perspective and Healthy Eating <i>RR Practice:</i> Insight imagery and joyful place imagery
7	Promoting Positivity and Physical Activity <i>RR Practice:</i> Contemplation
8	Healing States of Mind, Empathy, and Creative Expression <i>RR Practice:</i> Loving Kindness, I am... at peace meditation
9	Humor and Staying Resilient <i>RR Practice:</i> Idealized Self meditation

Treatment Adaptation of SMART-3RP

- Assembled a volunteer group of clinicians
- Changed program delivery to Zoom
- Expanded definition of frontline clinician

Program content was adapted to target perceived stressors:

- work-related stressors
- Isolation
- health and job uncertainty and concerns
- clinical role transitions
- financial challenges
- family challenges

Design Adaptation of SMART-3RP

- Changed structure of sessions
- Changed timing of sessions
- Created adaptations weekly
- Clinical supervision held biweekly
- Created abbreviated 25-item assessment tool

Front-Line Clinician Resiliency Groups



- 8 one-hour sessions
- Twice weekly groups
- Remote
- No intake
- Electronic sessions

Group co-facilitation



ACHIEVING Acceptance



How can I come to accept this situation?

What can I learn from this situation?

How might I be loving in this situation?



MASSACHUSETTS
GENERAL HOSPITAL

CANCER CENTER

Drains



Charges

Not getting enough sleep

Family is home all day long

Long and inconsistent work hours

Contagion concerns

Unhealthy snacking

Gym closed

Calling or texting a friend

Taking a walk outside

A family meal

Hearing support for the work you do

Stretching

A Netflix show

Social Support



Emotional Support



Belonging Support



Informational Support



Tangible Support



Self-Esteem/Affirmational Support

Using clinic-based stressors

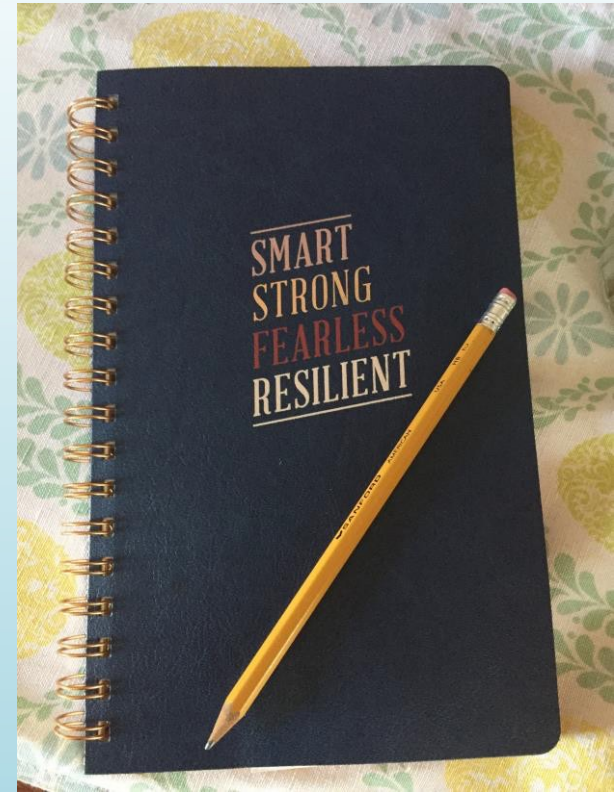
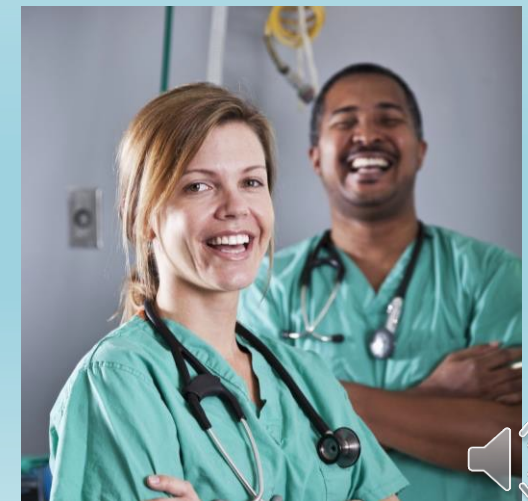
Coping Log: Changing the Way We Think

Stressful Event: We're understaffed at work

Physical Signs/Behaviors	Emotions	Negative Thoughts	Thought Distortions	Adaptive Emotions	Adaptive Thoughts	Physical Signs/Behaviors
<i>Shallow breathing</i> <i>Muscle tension</i> <i>Headache</i>	<i>Irritability</i> <i>Worry</i> <i>Anxiety</i> <i>Anger</i>	<i>Everything always falls to me</i> <i>We should've had better systems in place</i> <i>I'll have to work late again</i> <i>This is ridiculous!</i>	<i>Connect the distortions to the thought:</i> <i>All-or-Northing</i> <i>Mind Reading</i> <i>Fortune Telling</i> <i>Should Statements</i>			

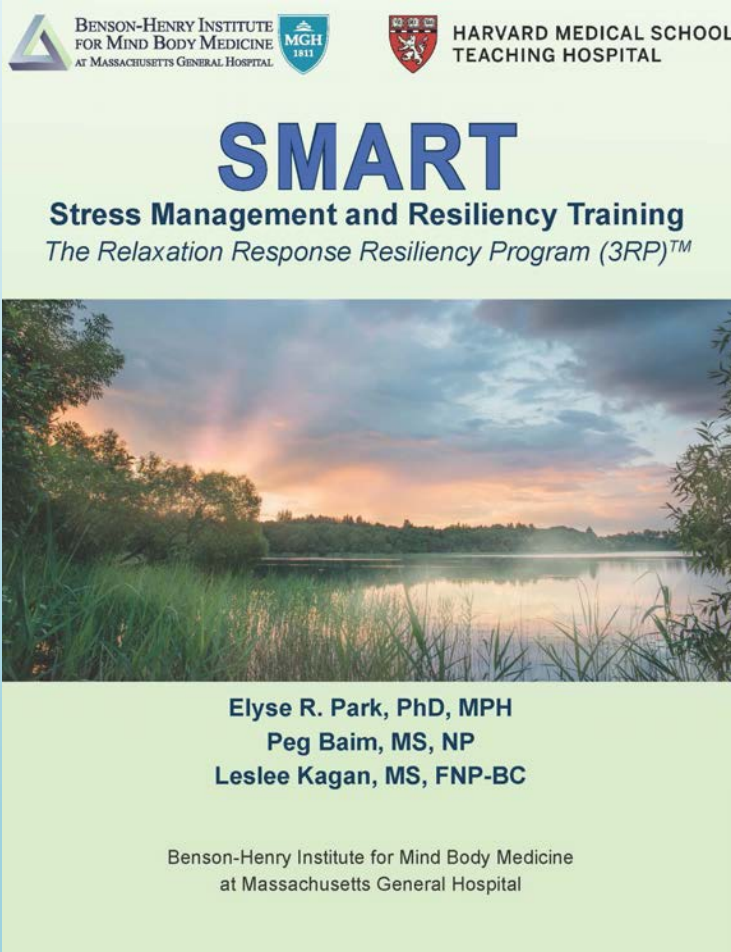
Appreciations

- 3 daily
- Small things in your day
- Reminders of what's important in life



Study Aim

- Frontline clinician resiliency (FCR) program
 - Aim: To explore changes in resiliency among FCs from baseline to after a virtual resiliency program (SMART-3RP)
 - ▶ Hypothesis: FCs will report improvements in stress coping and secondary outcomes after the SMART-3RP program



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BENSON-HENRY INSTITUTE FOR MIND BODY MEDICINE AT MASSACHUSETTS GENERAL HOSPITAL

MGH 1811

HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

SMART

Stress Management and Resiliency Training
The Relaxation Response Resiliency Program (3RP)™

Elyse R. Park, PhD, MPH
Peg Baim, MS, NP
Leslee Kagan, MS, FNP-BC

Benson-Henry Institute for Mind Body Medicine
at Massachusetts General Hospital

Methods

- Recruitment through hospital wide emails and departmental announcements
- Remote program delivery
 - 8 weekly sessions delivered via MGB and HIPAA-approved Zoom
 - Groups co-led by psychologists, physicians, social workers, and/or nurses at MGH trained in delivery of SMART-3RP
 - Online assessments via MGB-approved research electronic data capture (REDCap)
 - SMART-3RP grounded in:
 - Relaxation response elicitation
 - Mindfulness
 - Cognitive behavioral therapy
 - Positive psychology

Assessments

- Primary Outcome
 - Stress Coping (1 item Analog Scale developed by Dr. Park)
- Secondary Outcomes
 - Anxiety (Patient Health Questionnaire-2)
 - Depression (Patient Health Questionnaire-2)
 - Stress Reactivity (Measure of Current Status)
 - Resilience (Current Experiences Scale)
 - Loneliness (UCLA Loneliness Scale)
 - Mindfulness (Cognitive and Affective Mindfulness Scale—Revised)
 - Self Compassion (Self-Compassion Scale)

Patient Baseline Characteristics (n=102)

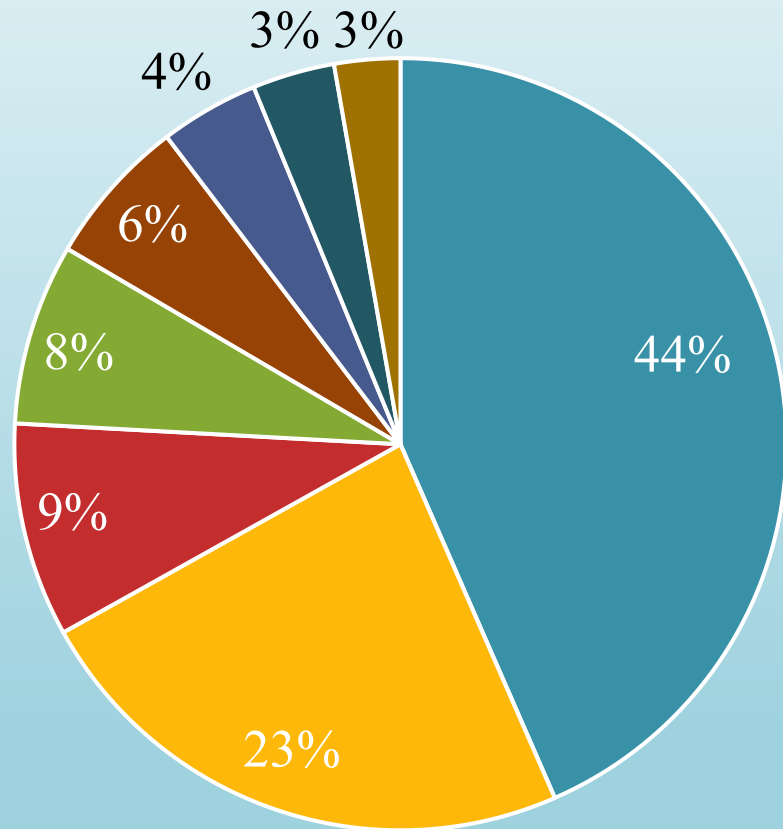
Age (M, SD)	45.1 (12.2)
Female	92.1
Hispanic	9.8
White	83.3
Black	3.9
Asian	8.8 %
Work Hours In the Past Month:	
Increased	34.3
Work Factors in Past Month:	
My work setting has changed	81.4
My clinical role has changed	49.0

Reach & Engagement: April-June 2020

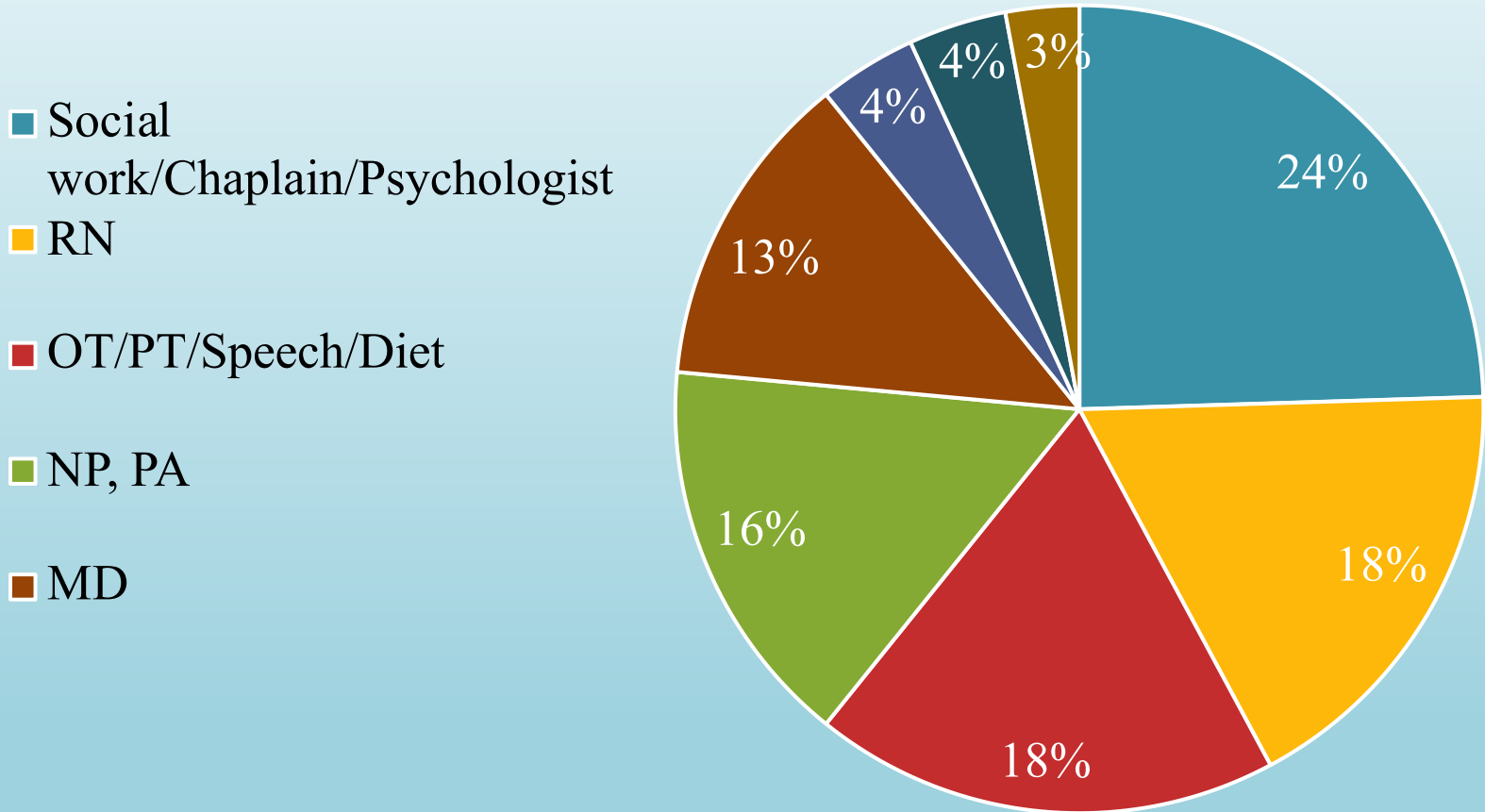
- Reach: 147 frontline providers at 11 hospitals registered
- Engagement: 17 remote resiliency groups were led by trained MGH clinicians
- 102 (68%) attended at least one session; on average clinicians attended 6 (75%) of the 8 sessions.

MGB Sites Represented

- MGH
- BWH/Faulkner
- MGB Community Physician Organizations (N=4)
- North Shore Medical Center
- Emerson
- NWH
- Spaulding/Mass Eye and Ear



MGB Provider Specialties



Pre/post treatment outcomes (n=75)

	Pre M (SD)	Post M (SD)	p-value	Cohen's D
Primary Outcomes (Score Range)				
Stress Coping (analog; 0-10)	6.5 (1.5)	7.4 (1.1)	< .01	0.66
Stress Coping Personal Strengths (MOCS-A; 1-5)				
Coping Response	3.3 (0.8)	4.0 (0.7)	< .01	0.80
Emotionally Balanced Thoughts	3.5 (0.7)	3.9 (0.7)	< .01	0.50
Resiliency (CES; 0-10)	6.3 (1.4)	7.1 (1.5)	< .01	0.56
Emotional Distress (PHQ-4; 0-12)	3.9 (2.7)	2.3 (1.9)	< .01	0.64
Secondary Outcomes				
Loneliness/Isolation (UCLA; 2-8)	3.1 (1.1)	2.7 (0.9)	< .01	0.44
Mindfulness (CAMS-R; 2-8)	5.5 (1.2)	6.1 (1.1)	< .01	0.55
Self-Compassion (SCS; 1-5)	3.7 (0.9)	3.3 (1.0)	< .01	0.35

COVID-Related Concerns

- Concerns for self (physical and emotional wellbeing)
- Concerns for patients (safety and receipt of adequate care)
- Concerns for family members (spreading virus to them, reduced time with them)
- Concerns for staff (safety and strain on social dynamics)
- Existential concerns/concerns for state of world (uncertainty about disease and impact on society)
- Systems-level work concerns (lack of leadership or supplies)
- Job-level concerns (impact on job stability or roles)

Program Acceptability

	%
Program Met Needs:	
Agree	96
Program Helpful:	
Agree	97

What was most helpful?

- Connecting with others facing similar workplace challenges.
- Learning targeted stress-coping techniques.



Moderator Analysis

Results based on mixed-effects regression models for each potential moderator



Please scan the QR code to view in detail

VARIABLE	SUBGROUP	DIFFERENTIAL EFFECT*	95% CI	P-VALUE
Age	(per 10-year increase)	-0.10	[-0.37, 0.17]	0.46
People in household		0.19	[-0.04, 0.43]	0.10
Gender	Male	-0.04	[-1.27, 1.17]	0.94
	Female	Reference		
Race	Other†	0.12	[-0.63, 0.88]	0.75
	White, non-Hispanic	Reference		
Work hours in the past month	Decreased	-0.67	[-1.53, 0.19]	0.31
	Stayed the same	-0.26	[-1.00, 0.48]	
	Increased	Reference		
Clinical specialty	NP/PA	-0.27	[-1.42, 0.88]	0.53
	RN	-0.26	[-1.40, 0.87]	
	OT/PT/Respiratory/Speech/Diet Therapist	-0.85	[-1.98, 0.27]	
	Social Worker/Chaplain/Psychologist	-0.69	[-1.75, 0.35]	
	Other‡	0.18	[-1.41, 1.72]	
	Physician (MD)	Reference		
Focus on present moment (CAMS-R item)	Not at all/sometimes	0.99	[0.36, 1.61]	<0.01
	Often/almost always	Reference		
Accept thoughts and feelings (CAMS-R item)	Not at all/sometimes	1.32	[-0.68, 1.97]	<0.01
	Often/almost always	Reference		
Anxiety (PHQ4 2-item sum)		0.25	[0.08, 0.42]	0.01
Depression (PHQ4 2-item sum)		0.42	[0.21, 0.62]	<0.01
Tough on myself (SCS item)		0.41	[0.05, 0.77]	<0.01
Loneliness (UCLA 2-item sum)		0.36	[0.08, 0.63]	0.01
Health uncertainty		0.18	[-0.21, 0.56]	0.37
Ability to choose coping response (MOCS-A item)		-0.45	[-0.83, 0.06]	0.02
Emotionally balanced thoughts (MOCS-A item)		-0.39	[-0.82, 0.05]	0.08

*Differential effect corresponds to the difference in average perceived SC improvement for subgroup vs. reference group (for categorical variables) or per one-unit increase in variable (for continuous variables), except as noted for age, which corresponds to a per 10-year increase. Positive/negative differential effect indicates more/less improvement in average perceived SC.

†Includes 2 American Indian or Alaska Native, 9 Asian, 4 Black or African American, 7 Hispanic, and 1 Other

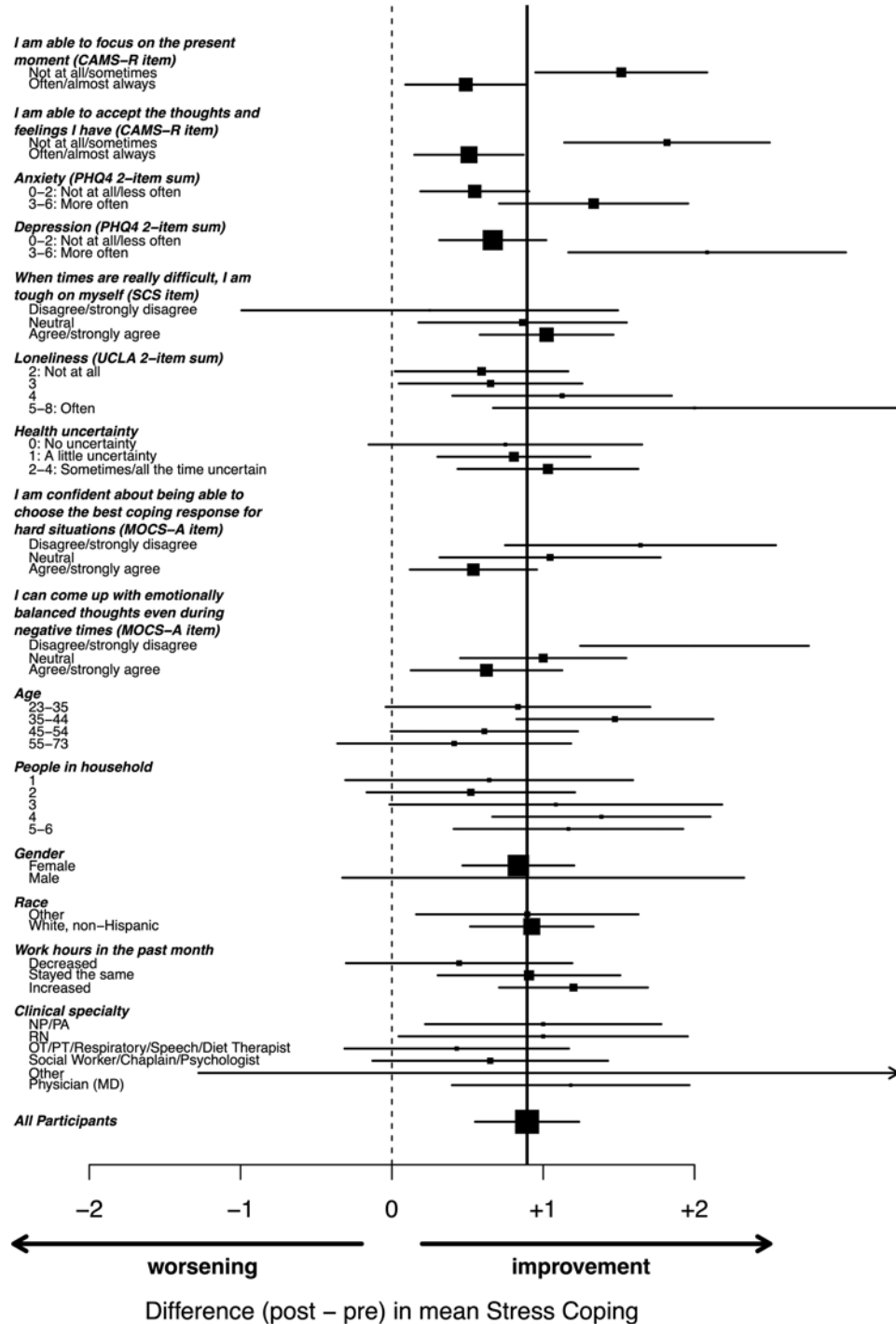
‡Includes 4 Technicians/Translators, 3 Advance Practice Clinicians/Midwives/Nurse Anesthetists, and 4 Other.

Moderator Analysis

Forest plot of the differential effect of each moderator



Please scan the QR code to view in detail



Summary of Moderator Analysis

- Perceived stress coping significantly improved from pre to post-intervention (model-based mean improvement = 0.9, 95% CI: 0.6 to 1.2)
- Individuals who benefited more (i.e., improved perceived stress coping) were:
 - Less mindful and self-compassionate at baseline
 - More anxious, depressed, and lonely at baseline
- Sociodemographic variables, work characteristics, or baseline health uncertainty did not moderate changes in perceived stress coping

Limitations and Clinical Implications

- Limitations

- Only a few items were used from the empirically validated scales
- Generalizability of results limited by lack of sample diversity
- Self-reported outcomes

- Clinical Implications

- Preserving FC resiliency is important during the pandemic
 - Targeted, accessible group-based treatment may help
- Early intervention during an emergency response may improve psychological outcomes
- An FC adapted resiliency group program can be offered to FCs in future emergencies to improve resiliency and perceived stress coping

COVID-19 Pandemic: March 13, 2020



Objectives

Create an adapted treatment for frontline clinicians...
immediately

Obtain IRB approval... immediately

Create a healthcare system-wide outreach

Assess its feasibility, acceptability, and preliminary
efficacy



Treatment Adaptation of SMART-3RP

Assembled a volunteer group of clinicians
Changed program delivery to Zoom
Expanded definition of frontline clinician

Program content was adapted to target perceived stressors:

work-related stressors

Isolation

health and job uncertainty and concerns

clinical role transitions

financial challenges

family challenges



Design Adaptation of SMART-3RP

Changed structure of sessions

Changed timing of sessions

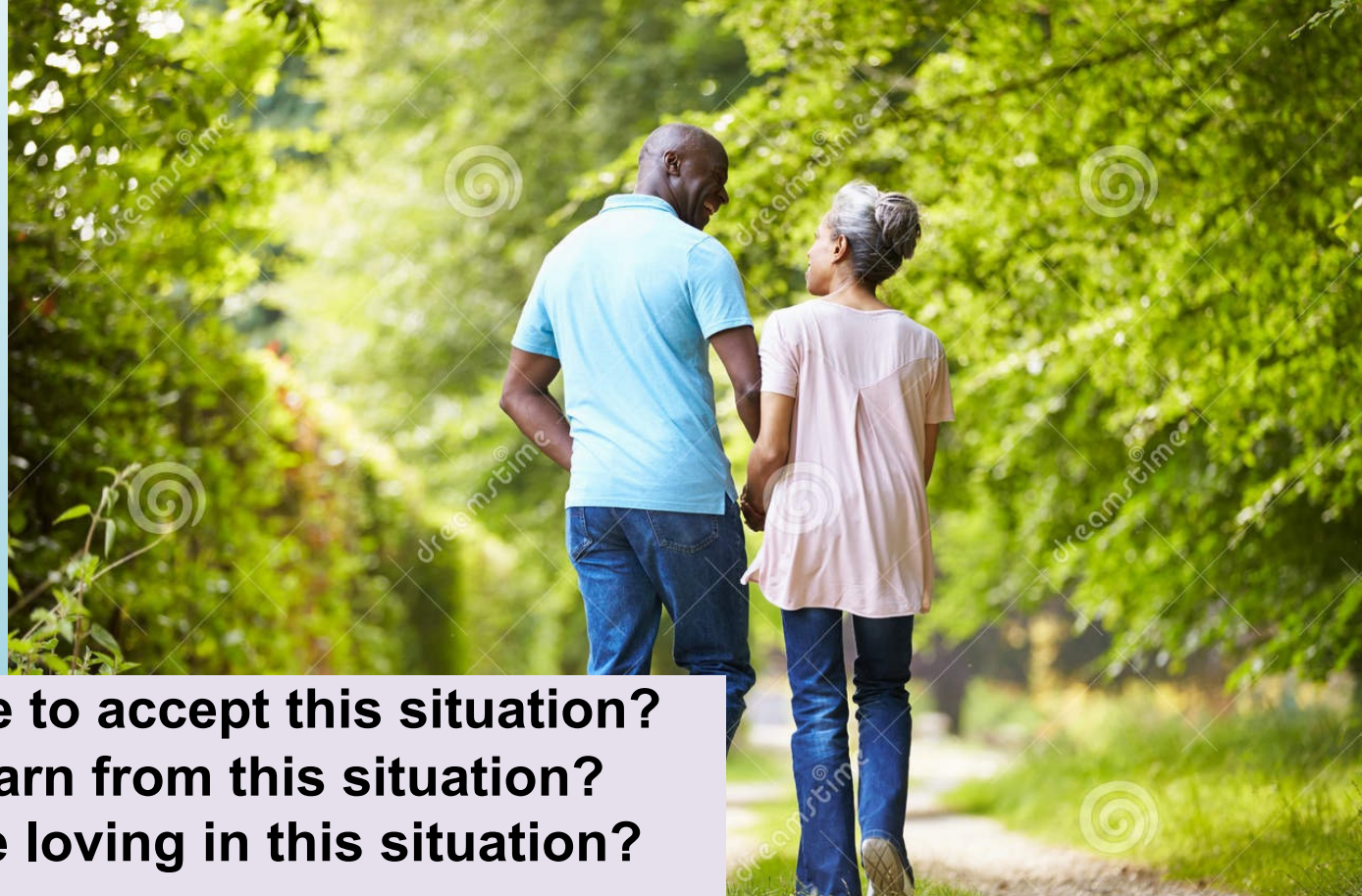
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ACHIEVING Acceptance



**How can I come to accept this situation?
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MASSACHUSETTS
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Drains



Charges

Not getting enough sleep

Family is home all day long

Long and inconsistent work hours

Contagion concerns

Unhealthy snacking

Gym closed

Calling or texting a friend

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Emotional Support



Tangible Support



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Informational Support

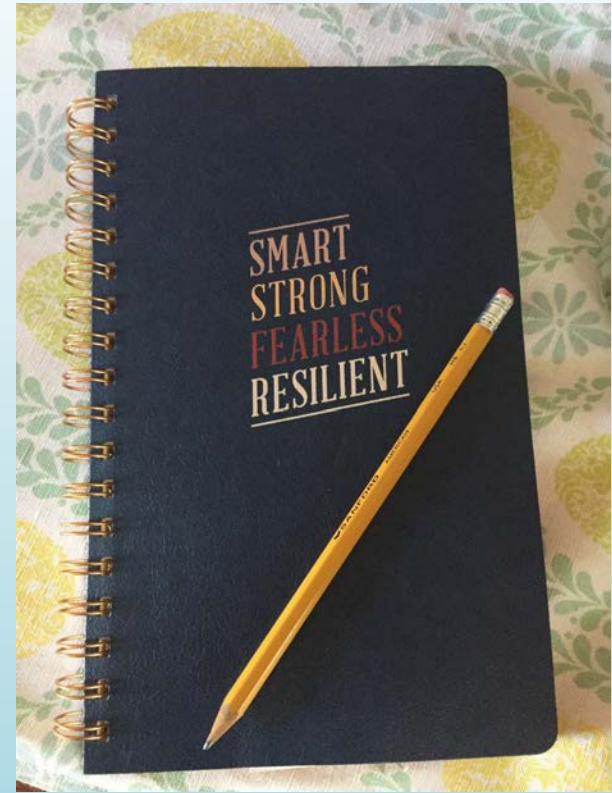
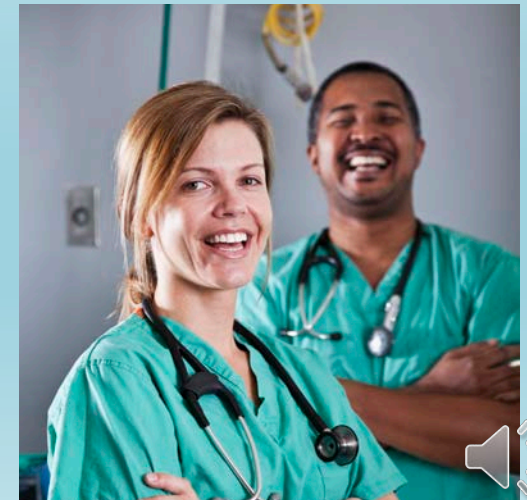


Self-Esteem/Affirmational Support



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- 3 daily
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- Reminders of what's important in life



HUMOR



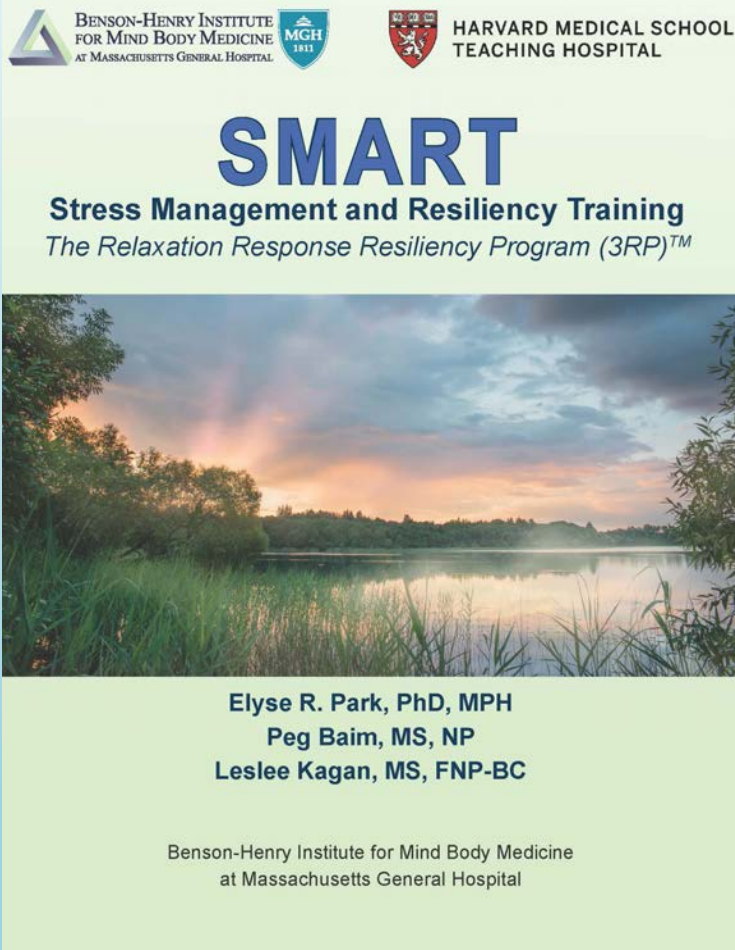
This is Wilson. He is now working from home 😊



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Self Compassion (Self-Compassion Scale)

Front Line Clinicians

Physicians

Nurses

Physical therapists

Occupational therapists

Respiratory therapists

Speech therapists

Advance practice providers (physician assistants, nurse anesthetists, midwives)

Mental health clinicians

Chaplains



Patient Baseline Characteristics

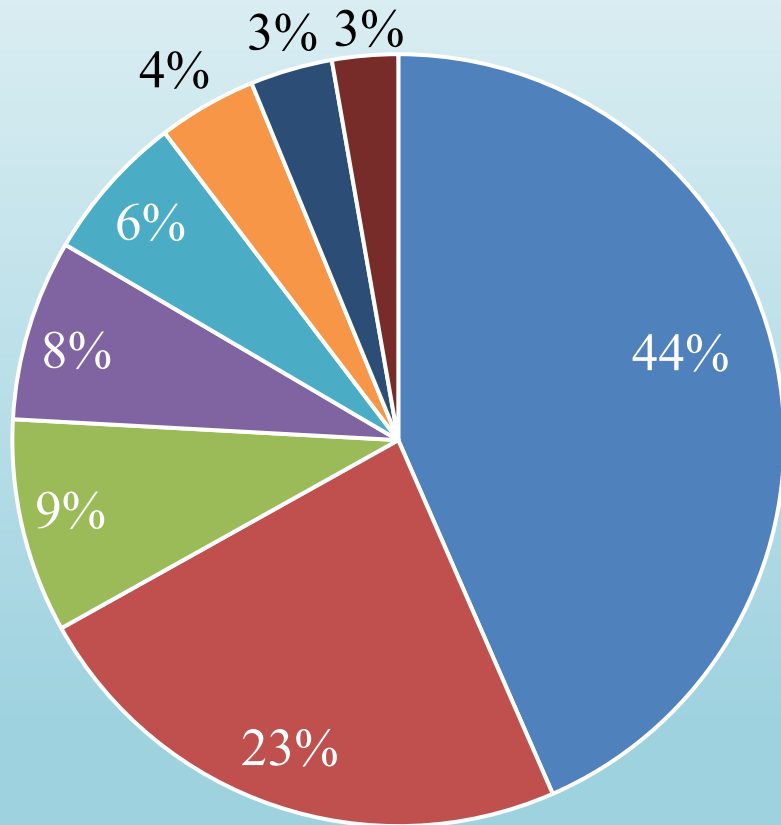
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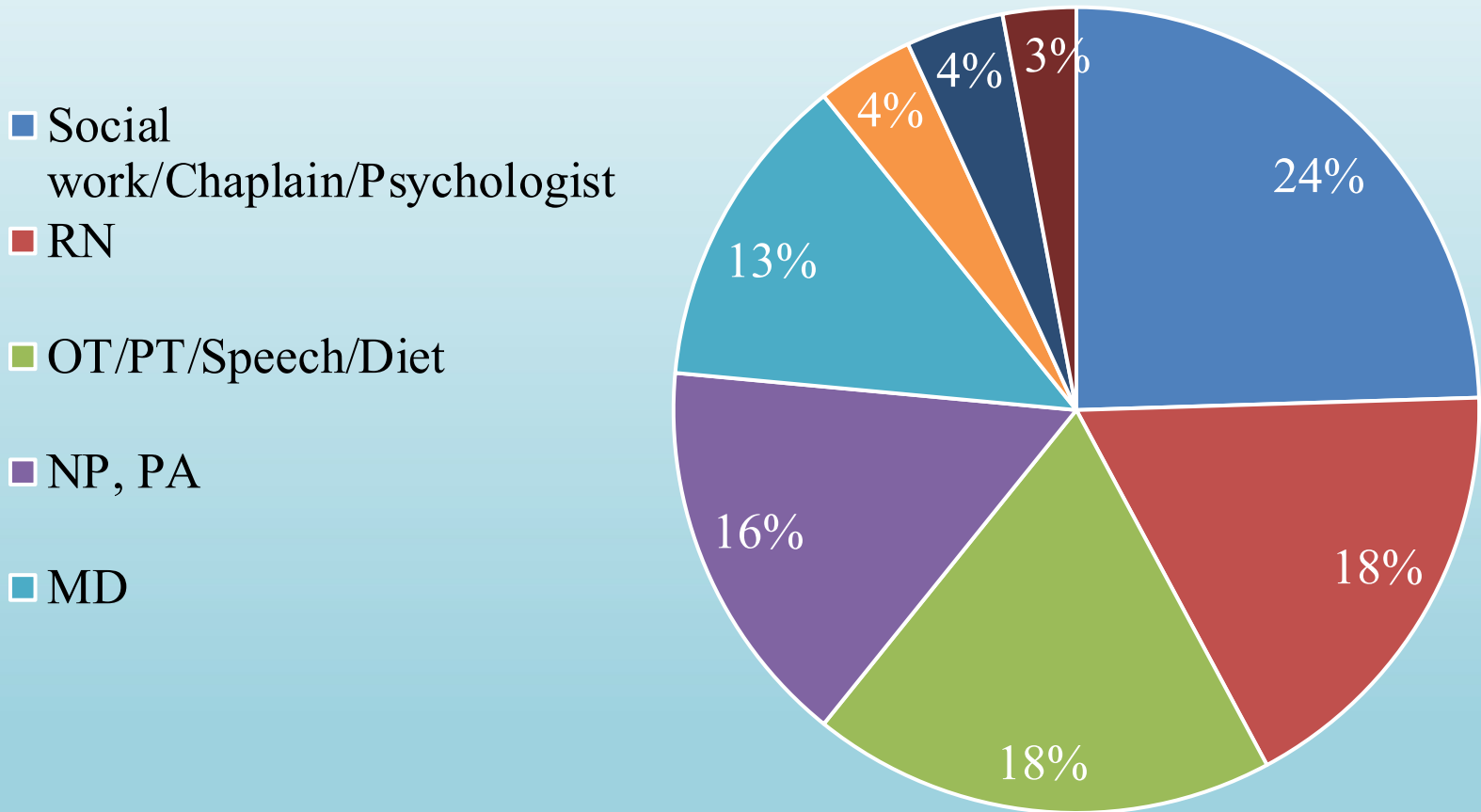


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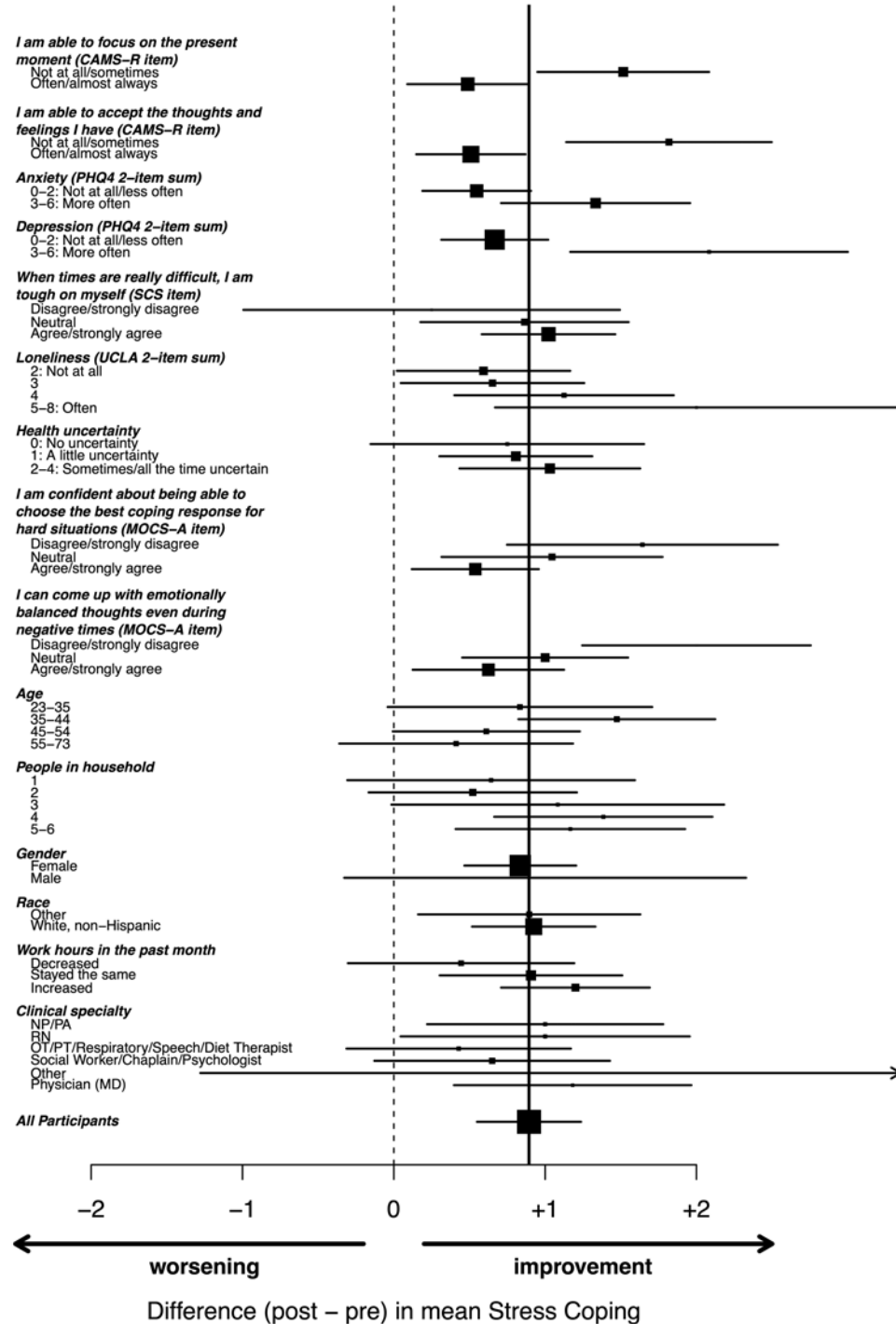


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Accept thoughts and feelings (CAMS-R item)	Not at all/sometimes	1.32	[-0.68, 1.97]	<0.01
	Often/almost always	Reference		
Anxiety (PHQ4 2-item sum)		0.25	[0.08, 0.42]	0.01
Depression (PHQ4 2-item sum)		0.42	[0.21, 0.62]	<0.01
Tough on myself (SCS item)		0.41	[0.05, 0.77]	<0.01
Loneliness (UCLA 2-item sum)		0.36	[0.08, 0.63]	0.01
Health uncertainty		0.18	[-0.21, 0.56]	0.37
Ability to choose coping response (MOCS-A item)		-0.45	[-0.83, 0.06]	0.02
Emotionally balanced thoughts (MOCS-A item)		-0.39	[-0.82, 0.05]	0.08

*Differential effect corresponds to the difference in average perceived SC improvement for subgroup vs. reference group (for categorical variables) or per one-unit increase in variable (for continuous variables), except as noted for age, which corresponds to a per 10-year increase in variable. Positive/negative differential effect indicates more/less improvement in average perceived SC.

†Includes 2 American Indian or Alaska Native, 9 Asian, 4 Black or African American, 7 Hispanic, and 1 Other

‡Includes 4 Technicians/Translators, 3 Advance Practice Clinicians/Midwives/Nurse Anesthetists, and 4 Other.

Summary of Moderator

Perceived stress coping significantly improved from pre to post-intervention (model-based mean improvement = 0.9, 95% CI: 0.6 to 1.2)

Analysis

Individuals who benefited more (i.e., improved perceived stress coping) were:

- Less mindful and self-compassionate at baseline

- More anxious, depressed, and lonely at baseline

Sociodemographic variables, work characteristics, or baseline health uncertainty did not moderate changes in perceived stress coping

Limitations and Clinical

• Limitations

Implications

- Only a few items were used from the empirically validated scales
 - Generalizability of results limited by lack of sample diversity
 - Self-reported outcomes
- Clinical Implications
 - Preserving FC resiliency is important during the pandemic
 - Targeted, accessible group-based treatment may help
 - Early intervention during an emergency response may improve psychological outcomes
 - An FC adapted resiliency group program can be offered to FCs in future emergencies to improve resiliency and perceived stress coping

“This is my moment.”

- Frontline clinician group participant



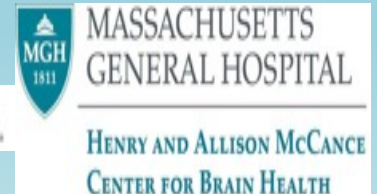
Resilience Training

Resilience and Prevention Program at MGH

Funding Sources



GOOD SAMARITAN, INC.



The pandemic has had a *huge* impact on mental health



- **More than triple the previous rate of anxiety and depression, i.e., 41.1% of U.S. adults reported symptoms of anxiety and depression in January 2021, compared to 11% of adults in January 2019**
- Studies conducted in China, Italy, the UK, Spain, South America, and Africa have found similar results

3 in 5

are experiencing symptoms of depression, anxiety, or both.



8 in 10

are experiencing symptoms of moderate to severe distress.



Erica Hutchins Coe et al., "Returning to Resilience: The Impact of COVID-19 on Mental Health and Substance Use," McKinsey & Company, April 2, 2020.

Prevention in Medicine – a great success story



- **Prenatal vitamins** → neural tube defects
- **Vaccinations** → childhood infections
- **Smoking cessation** → cardiovascular disease, cancer
- **Pap smear, mammogram, colonoscopy, PSA test** → cancer



Hand washing, mask wearing...

What about a “vaccine” for mental illness?

Current research shows we can do this.

What can foster resilience?



Social connections/support
Exercise, good sleep,
good nutrition
Humor
Economic and home stability
A sense of purpose, mission

But sometimes these are **not available** or **not enough...**



Modifiable factors known to increase resilience

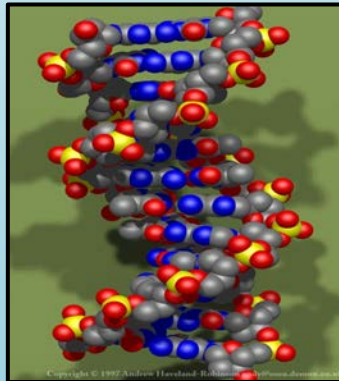


- Strong social connections
- Physical activity
- A sense of purpose or meaning in life
- Spirituality/religion
- Optimism/capacity for positive emotion
- Cognitive flexibility
- **Certain ways of experiencing the world around us and ourselves**

Our program uses a “transdiagnostic” approach:



Focused on **risk factors** and on increasing **resilience** –
the capacity to manage or
bounce back from stressful situations

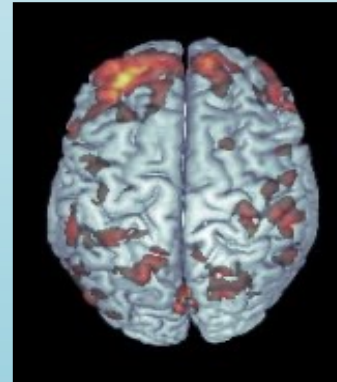


GENES



PAST EXPERIENCES

e.g., difficulties in
childhood, such as loss
of a parent, abuse,
neglect



BRAIN
CHARACTERISTICS



PATTERNS OF
THOUGHT

e.g., pessimism, fear of others,
rumination, emotional reactivity

The Resilience Training (RT) program: How does it work?



- Refer to program as a “course” or “workshop” to reduce perceived stigma of mental health treatment
- Provide a 4-week **Resilience Training** course (7-12 participants per workshop, with 2 facilitators)
- Weekly sessions include: didactic information, experiential exercises, group discussions, home practice

Resilience Training (RT)

focuses on 3 evidence-based tools:



Mindfulness

Shown to reduce depression and anxiety and improve brain health



Self-Compassion

- Shown to lower levels of distress



Mentalization

- Shown to improve social functioning

Mindfulness



Mindfulness: paying close attention to the experiences of the **present** – of bodily sensations, the external world, feelings, thoughts – without judging or avoiding these experiences

Numerous studies show that mindfulness increases *resilience*, decreases psychiatric symptoms and increases *brain health*



Mindfulness practice doesn't have to be perfect...



- You don't have to have a quiet place to do it...
- Or sit a certain way...
- Can do it while eating, driving, brushing your teeth, washing your hands...
- Or whenever you notice that you are stuck in a sequence of thoughts or worries about the future or past, or feeling the stress of uncertainty...

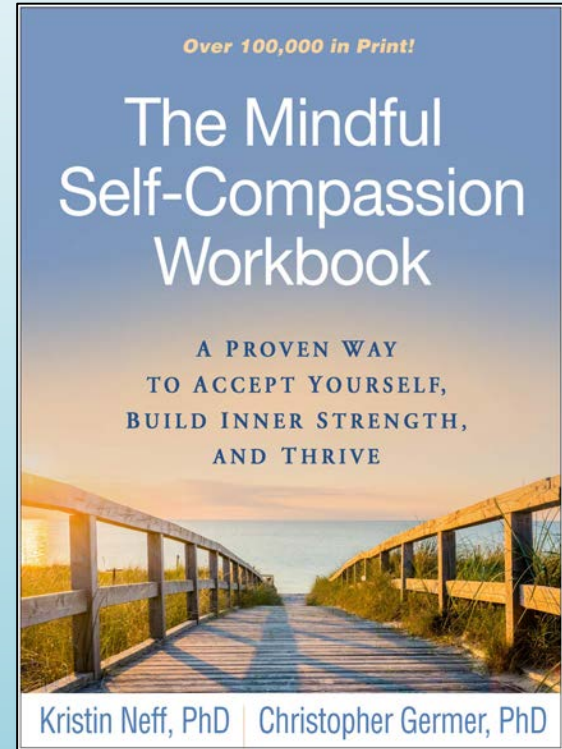
Session 1

Brief Mindfulness Exercise

Self-Compassion



Self-compassion practice involves learning to treat ourselves with kindness during difficult times, like we would treat a friend who was in a similar situation



Self-compassion → greater compassion for others → greater social connectedness

Self-Compassion explained



Session 3

When are you hard on yourself?

Mental barriers to self-compassion



- “It will make me weak, selfish, lazy...”
- I’ll let myself off the hook, get away with murder.. I need to be hard on myself when I mess up...”
- “Self-criticism is what drives me to succeed”



Chris Germer, PhD- Author of Mindful Self-Compassion Workbook



Mentalization

Mentalization is the ability to understand (or think flexibly about) the mental states and intentions of others

1. playful

2. comforting



3. irritated

4. bored

Why should we mentalize?



Uncertainty is challenging for the mind



Ways of interpreting the world in a moment of uncertainty that can increase distress:

- Jumping to Conclusions
- Catastrophizing
- Mind Reading

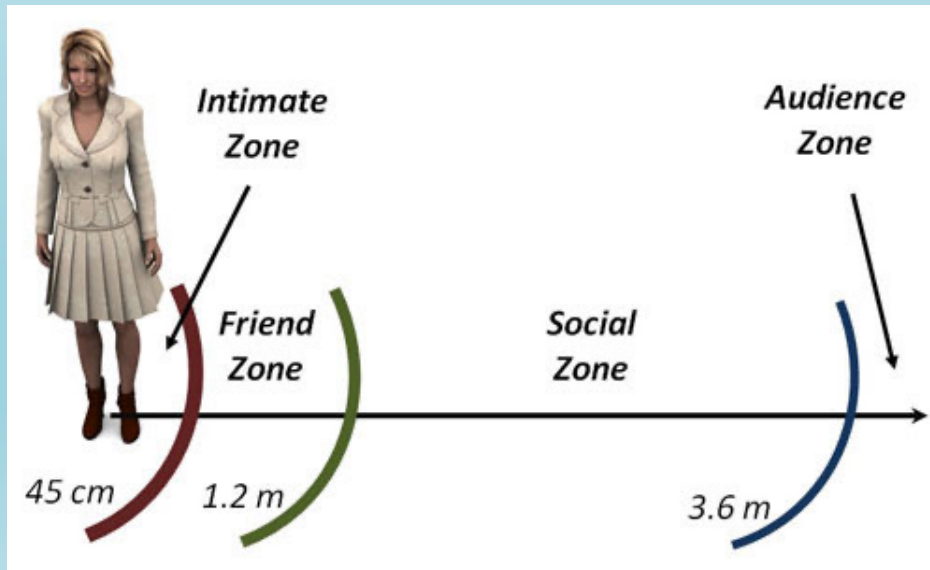


Goal: **to think flexibly and consider a range of possibilities** when imagining the future, the motives of others and other experiences that are associated with limited data from which you can draw conclusions

Another aspect affected by the pandemic- Personal Space



- Larger personal space has been found to be related to **social functioning**
- We have also found that personal space has **increased** since social distancing



How we can expose ourselves *safely*



- We conduct Resilience Training in Virtual Reality (VR)
- Immersive VR helps you feel like you are within arms length of another person (avatar)
- Run it as a typical in-person group
- Even show slides
- We can change anything we want-
 - Which environment we are in
 - How far apart we are

One group environment



Resilience Training (RT): The Overall Model



RT Targets

Self
Compassion

Mindfulness

Mentalization

Resilience



Later Outcomes

Lower depression

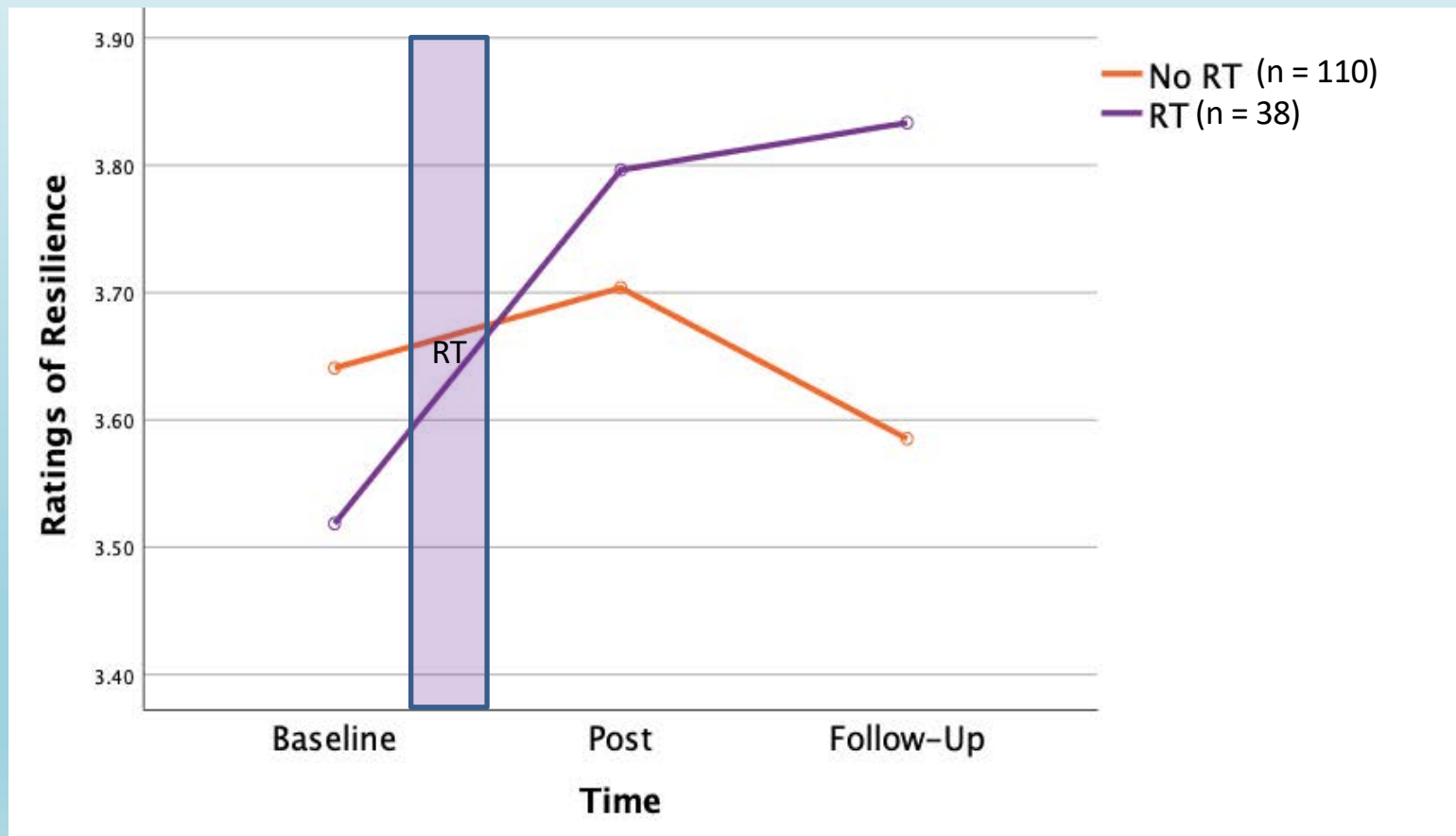
Lower psychotic-like
experiences

Lower anxiety

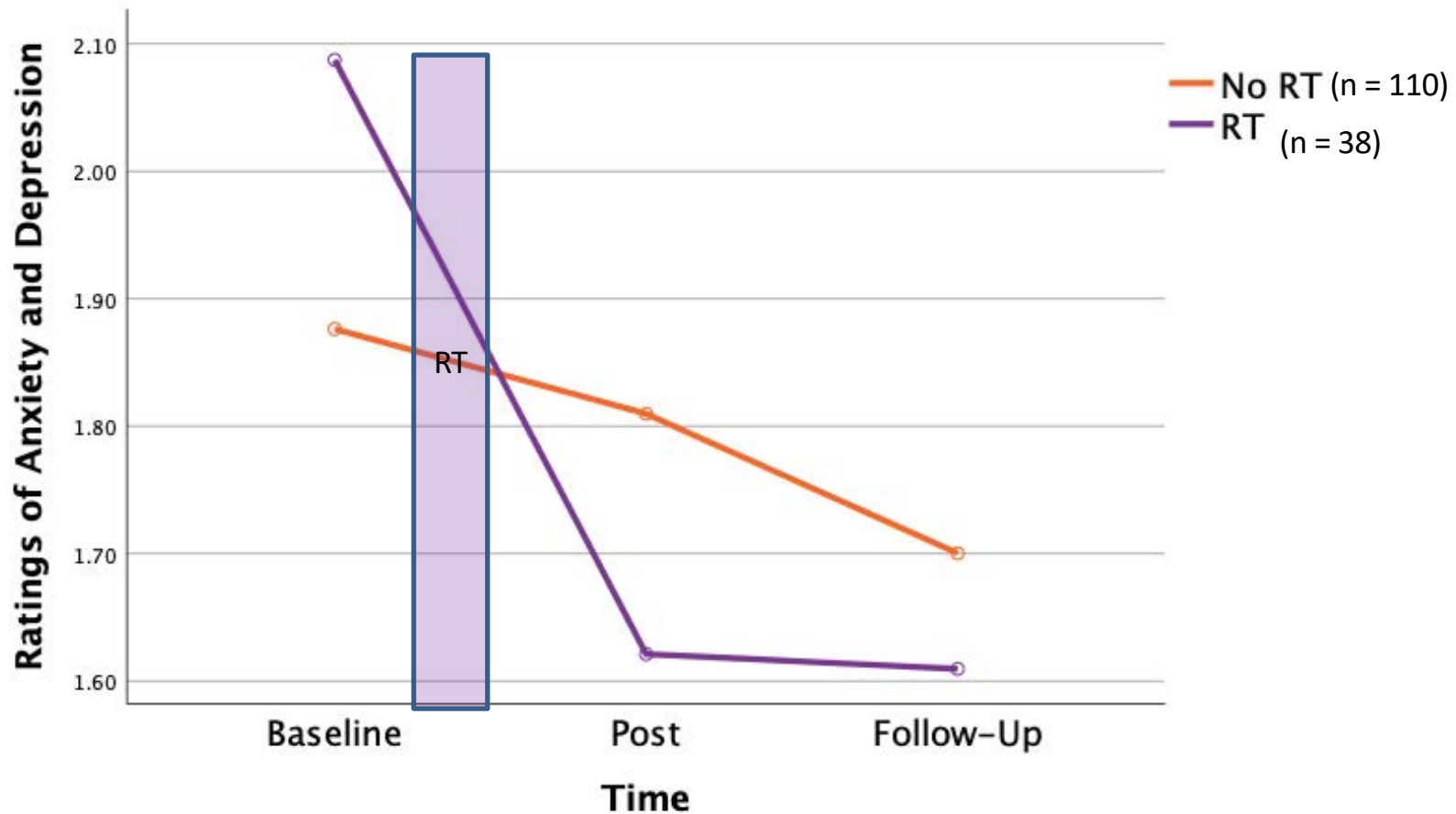
Higher social
Functioning

N = 1371

MGB healthcare workers who received RT showed increases in resilience



MGB healthcare workers who received RT
experienced
decreases in anxiety and depression



Unintended benefits of this stressful time



Less stigma around mental health concerns: people finally talking about it! In the news constantly.

Greater access: telehealth and community-based mental health resources are currently covered by insurance and happening frequently.

New emphasis on **“positive” mental health**, not just on getting rid of symptoms –can build existing strengths, resilience, before major problems occur. The term “resilience” is everywhere now!



Q & A