



# RESILIENCE AT HOME BASE AND THE BROADER MILITARY COMMUNITY

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A RED SOX FOUNDATION AND  
MASSACHUSETTS GENERAL HOSPITAL PROGRAM



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# DISCLOSURES

We have no disclosures.

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# OVERVIEW

- What is Home Base?
- Importance of resilience training for military populations
- Description of resilience programs
- Resilience program data
  - Warrior, Family, Students, Youth
- Collaborations, expansion
- Questions?



# MISSION

**The mission of Home Base, A Red Sox Foundation and Massachusetts General Hospital Program, is to heal the invisible wounds for Veterans, Service Members and their Families through world-class clinical care, wellness, education and research.**



# FOUR PILLARS OF SERVICE



## CLINICAL CARE

Delivering comprehensive, individualized, evidence-based care for traumatic brain injury, post-traumatic stress, military sexual trauma, and many related conditions



## TRAINING AND CAPACITY BUILDING

Training community-based clinicians, first responders, educators, and social service leaders to recognize and assist those with invisible wounds



## WELLNESS

Empowering Veteran and military families to maintain long-term physical and emotional health, and build resilience to daily stressors



## TRANSLATIONAL AND CLINICAL RESEARCH

Driving discovery of new and improved treatments, and advancing the standard of care for Veterans across the nation



VETERAN  
AND FAMILY CARE

National Center of Excellence

# **RESILIENCE TRAINING FOR VETERANS AND FAMILIES**

# HOME BASE'S SIGNATURE RESILIENCE PROGRAMS

Resilient Warrior

Resilient Family  
& Caregiver

Resilient Youth

6-Session Educational Groups Adapted from MGH's Benson-Henry Institute for Mind Body Medicine's Stress Management and Resiliency Training (SMART) Program

## Four Core Elements:

Stress Awareness

Practicing  
Relaxation  
Response (RR)  
Techniques

Adaptive  
Strategies

Self-Monitoring



# WHY RESILIENCY?

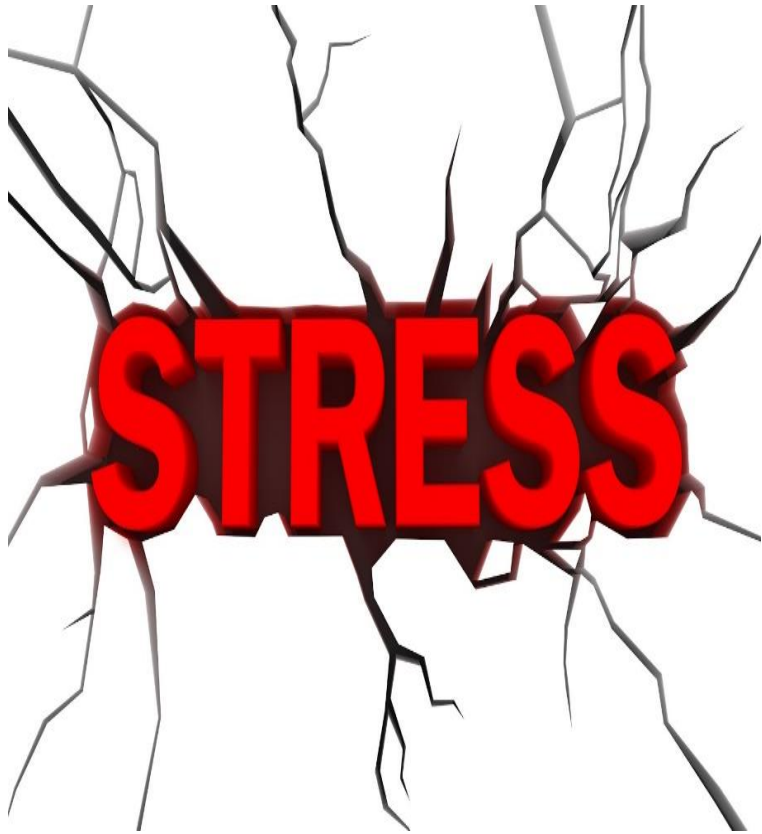
**RESILIENCY IS OUR ABILITY TO ADAPTIVELY RESPOND TO STRESSFUL SITUATIONS. IT MINIMIZES THE IMPACT OF STRESS ON OUR PHYSICAL AND EMOTIONAL HEALTH.**



More than 60% of all visits to primary care are for stress related conditions.



A large and growing body of evidence supports mind body medicine as an effective way to treat and decrease stress.



# STRESS RESPONSE

Stress is the body's response to any demand, positive or negative, big or small

**Stress = the perception of threat *and* the perception that we can't cope**

Stress becomes a problem when it outweighs our ability to cope

*Core Element:*

Stress Awareness

## STRESS RESPONSE

Stress is the body's response to any demand, positive or negative, big or small

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Stress becomes a problem when it outweighs our ability to cope



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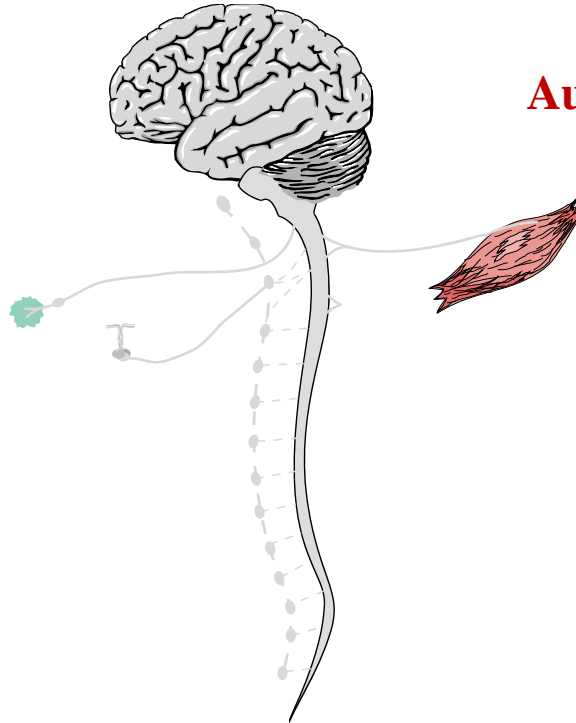
# HOW STRESS AFFECTS THE BODY

## Muscular System

Tension  
Ready for Action  
Jaws Clench  
Body Braces for Action

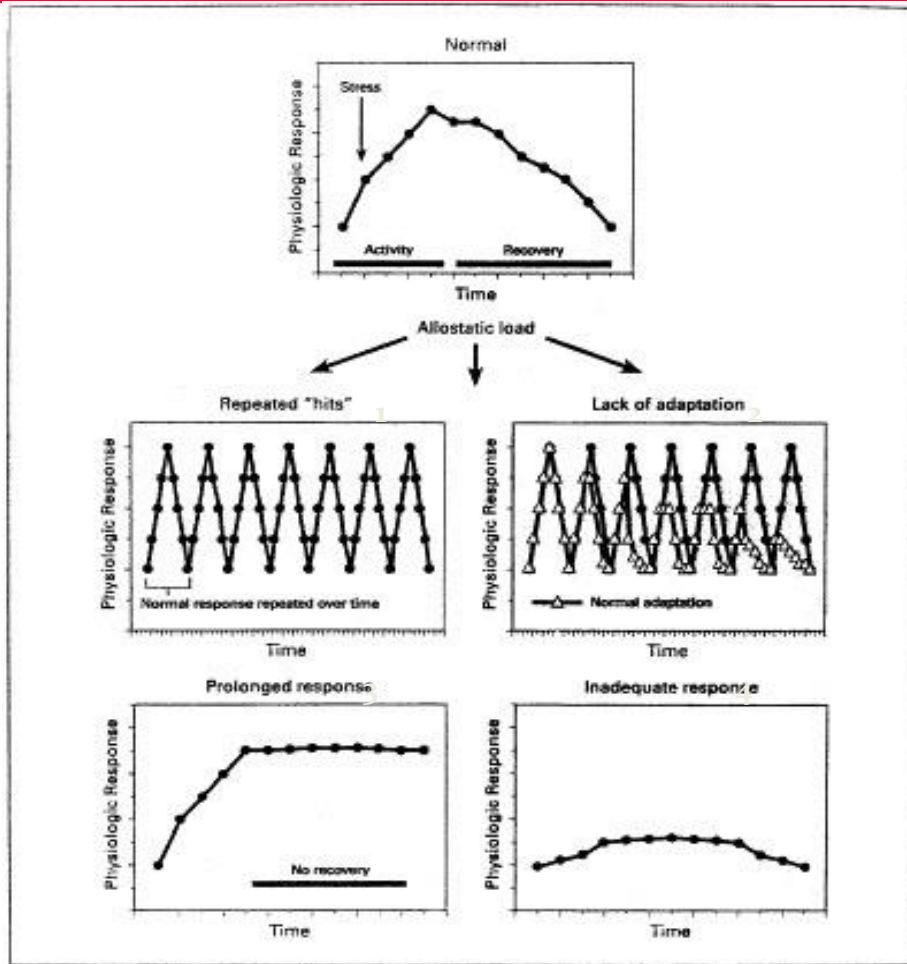
## Central Nervous System

Perception - Narrowed  
Memory - Coarse, Imprecise  
Learning - Blocked  
Conditioning - Defense  
Tendency - Regress or Perseverate  
Expectancies - Negative  
Tone - Flee or Destroy



## Autonomic Nervous System

Heart rate ↑  
Blood pressure ↑  
Oxygen need ↑  
Breathing rate ↑  
Palms, face sweat  
Blood sugar ↑  
Adrenaline flows  
Digestive tract →shunts  
blood to muscles  
Blood vessels constrict in hands  
and face



## Increased Allostatic Load:

1. Chronic stress
2. Lack of adaption to chronic stress
3. Failure to turn off stress response
4. Stress response is not adequate

*McEwen. New Engl J Med, 1998; 338: 171-179*

# WHERE DID THIS STUFF COME FROM??

- Herbert Benson, MD established the scientific basis for the mind-body connection in the late 1960's
- What he found was striking ... practitioners of meditation were able to significantly alter their metabolism, rate of breath, heart rate and brain activity



He labeled this response the  
**RELAXATION  
RESPONSE**  
It is the opposite of the Fight,  
Flight or Freeze response

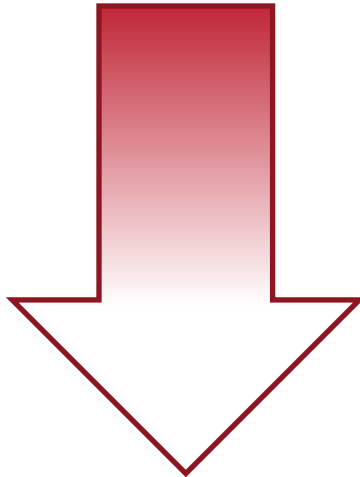
*Core Element:*

Practicing RR  
Techniques

# RELAXATION RESPONSE (RR)

## THE OPPOSITE OF FIGHT OR FLIGHT

The RR activates our PREFRONTAL CORTEX and our PARASYMPATHETIC nervous system



Adrenaline

Heart Rate

Blood Pressure

Breathing Rate

Muscle Tension

Memory and Concentration Difficulties

# THE RELAXATION RESPONSE

- Powerful enough to ↓HR, BP, RR, and O<sub>2</sub> Consumption/ Metabolic Rate
- Cell mitochondria takes a break/Oxidative stress ↓
- Up regulates genes of anti-oxidizing mechanisms
- Reduces limbic system arousal
- Synchronization of alpha and theta waves on EEG correlate with relaxed wakeful awareness
- Brain fMRI studies show involvement of neural structures involved with attention and arousal, and autonomic control



# **PROGRAM DESCRIPTION: RESILIENT WARRIOR/FAMILY**

# ADAPTATIONS FROM BENSON-HENRY INSTITUTE (BHI) SMART PROGRAM

- Military-based examples
  - Returning home from deployment, coping with family deployment
- Simplified the language and the science
  - Focus on application of the skills
- Fewer sessions to meet busy schedules of veterans, families
- Simplified the Daily Record
  - Included a focus on helping others
- Focus on the rationale for skills counter to military culture
  - Need for sleep
  - Importance of listening and assertive communication
  - Challenges with a top-down, dogmatic approach
  - Identifying and labeling emotions

# RESILIENT WARRIOR: CONSIDERATIONS FOR VETERANS

- Hypervigilance
  - Do not prefer glass classrooms (when this was adapted in-person)
  - Ringing or buzzing in the room can be distracting
- Military mentality
  - Stick together, We do not need sleep, There is nothing that I can't handle, I am here to help others, No one understands what I have been through
- Communication style/listening
  - Brief and aggressive
  - Many have damaged hearing and/or ringing in their ears
- Cognitive Difficulties
  - Difficult to focus
- Physical Challenges
  - Chronic pain, headaches



# RESILIENT FAMILY: CONSIDERATIONS FOR MILITARY FAMILIES

- Caregiver/family mentality
  - There is no time/people to help me, I do not deserve help, I must help others
- Communication style/listening
  - Passive and/or Passive Aggressive
- Depression/Stress
  - Difficult to focus
  - Difficulty prioritizing self
- Fatigue
  - Difficult to stay awake/tired



# RESILIENT YOUTH: CONSIDERATIONS FOR MILITARY-CONNECTED YOUTH

## Top Social-Emotional Concerns



### Students say:

1. Feeling of Acceptance/"Fitting In" (school and local culture)
2. Making friends
3. Managing stress
4. Building self-confidence
5. Dealing with parent deployment/reunion

### Parents say:

1. Making friends
2. Feeling of Acceptance/"Fitting In" (school and local culture)
3. Building self-confidence
4. Dealing with parent deployment/reunion
5. Managing stress

### Professionals say:

1. Dealing with parent deployment/reunion
2. Feeling of Acceptance/"Fitting In" (school and local culture)
3. Making friends
4. Addressing behavioral/mental health concerns (anxiety, depression, substance abuse, etc.)
5. Managing stress

# **PROGRAM DATA: RESILIENT WARRIOR**

# RESILIENT WARRIOR FEEDBACK

- Stressors
  - 100% military, 77% financial, 56% family, 53% work, 34% relationships, 29% physical health, 28% education
- Support when stressed
  - 50% fellow service, 41% spouse/partner, 37% family, member, 31% non-military friend, 31% healthcare provider
- 100% feel comfortable in group
- 39% want more classes
- 100% would recommend that program

# Resilient Warrior Results (2022)

Table 2.

## Pre-Post Changes on Psychosocial Measures Following the Resilient Warrior Online Program (N = 26)

Variable	N	Pretest score range	Pretest score mean (SD)	Posttest score range	Posttest score mean (SD)	t value	P value	Cohen's d
Depression (PHQ-8)	26	2 to 24	12.62 (6.19)	1 to 24	10.46 (6.79)	2.85a	.009	0.56
Stress (PSS-10)	25	13 to 34	21.52 (5.38)	10 to 32	20.92 (5.63)	0.65	.52	0.13
PTSD (PCL-5)	14	4 to 78	36.29 (19.58)	1 to 60	33 (19.33)	0.67	.51	0.18
Self-efficacy (GSE)	23	10 to 39	27.65 (7.33)	13 to 40	29.39 (6.69)	-1.39	.18	0.29
Sleep disturbance (PROMIS)	21	18 to 27	23.47 (2.23)	16 to 32	22.90 (3.46)	0.92	.37	0.20
Stress reactivity (MOCS-A)	23	0 to 44	19.43 (9.98)	1 to 40	23.69 (10.14)	-2.22b	.04	0.46
Mindfulness (CAMS-R)	21	21 to 38	27.28 (4.12)	18 to 48	30.86 (6.16)	-2.46b	.02	0.54
Resilience (CES)	19	17 to 110	73.63 (27.74)	15 to 120	77.05 (27.98)	-0.94	.36	0.21

CAMS-R = Cognitive Affective Mindfulness Scale-Revised; CES = Coping Expectancies Scale; GSE = General Self-Efficacy Scale; MOCS-A = Measure of Current Status-Abbreviated Scale; PCL-5 = PTSD Symptom Checklist for Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition); PHQ-8 = Patient Health Questionnaire-8; PROMIS = Patient-Reported Outcomes Measurement Information System; PSS-10 = Perceived Stress Scale-10.

<sup>a</sup> P < .01.

<sup>b</sup> P < .05.



# **PROGRAM DATA: RESILIENT FAMILY**

# RESILIENT FAMILY FEEDBACK

- Resilient Family was acceptable
  - All participants reported the course was comfortable, helpful, and relevant
  - All participants would recommend the course to others
  - Most participants (81.82%) reported that the length of the sessions was optimal
  - More than half of participants (54.55%) would prefer more sessions

# Resilient Family Results (2022)

Table 2

## Outcomes for the In-Person and Online Resilient Family Programs Combined

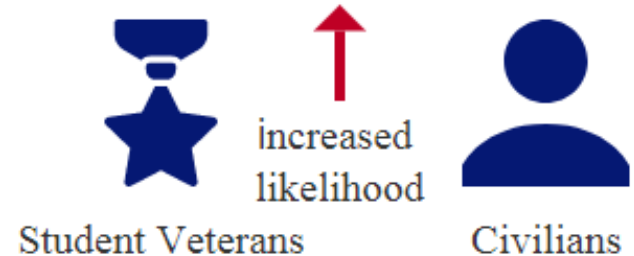
Variable	Baseline			Endpoint			<i>t</i>	Cohen's <i>d</i>	<i>p</i>	Cronbach's $\alpha$
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>				
PSS, range: 0-21	20.93	2.89	27	18.78	3.84	27	2.73	0.632	0.0113	0.785
GSE, range: 10-40	30.78	3.52	27	33.15	3.08	27	-4.73	0.716	0.0001	0.891
PHQ-8, range: 0-24	7.68	5.28	28	4.68	3.51	28	3.76	0.669	0.0008	0.857
PROMIS Sleep, range: 0-40	21.92	3.44	26	23.04	3.34	26	-1.58	0.329	0.1260	0.936

PSS: Perceived Stress Scale; GSE: General Self-Efficacy; PHQ-8 = Patient Health Questionnaire; PROMIS: Patient-Reported Outcomes Measurement Information System-Sleep Disturbance.

**PROGRAM DATA:  
RESILIENT STUDENT WARRIOR  
(NOW CALLED RESILIENT WARRIOR ON  
CAMPUS)**

# RESILIENT STUDENT WARRIOR

- More veterans attending higher education
  - Over 1,000,000 student veterans in 2013
- Service members are at heightened risk for PTSD, TBI, anxiety, and depression
- Resilient Student Warrior Course
  - 10 sessions or 24 sessions
  - 1-credit or 3-credits
  - Required class presentation, HW, paper, and attendance



- feel more alienated on their college campuses
- have children and/or be married
- of dropping out (50% more likely)

# RESILIENT WARRIOR ON CAMPUS FEEDBACK

- Resilient Student Warrior was acceptable
  - 92% reported the course was comfortable
  - 95% reported the course was relevant and 96% said the course was helpful
  - Most participants (95%) would recommend the course to others

# RESILIENT STUDENT WARRIOR RESULTS

	<i>N</i>	<i>Pre M(SD)</i>	<i>Post M(SD)</i>	<i>t</i>	<i>d</i>
<b>PHQ8</b>	85	6.84 (5.48)	6.16 (4.86)	1.788	.196
<b>PSS</b>	82	15.22 (7.66)	14.28 (7.28)	.95	.149
<b>GSE</b>	82	31.19 (4.92)	31.02 (4.52)	-1.68	.043
<b>MOCS</b>	35	25.49 (10.61)	33.20 (9.84)	-4.63***	.783
<b>PCL-M</b>	44	34.50 (15.91)	33.44 (16.25)	1.24	.113
<b>CAMSR</b>	39	29.90 (6.80)	32.67 (5.92)	-3.4**	.544
<b>PROMIS Sleep</b>	83	23.55 (7.54)	21.70 (8.38)	2.78**	.306
<b>CES</b>	33	83.45 (22.96)	91.00 (17.67)	-2.65*	.470

Note:  
 \*= $p < .05$ ,  
 \*\*= $p < .01$ ,  
 \*\*\*= $p < .001$

# **PROGRAM DATA:**

## RESILIENT YOUTH AT HOME BASE



# QUALITATIVE FEEDBACK

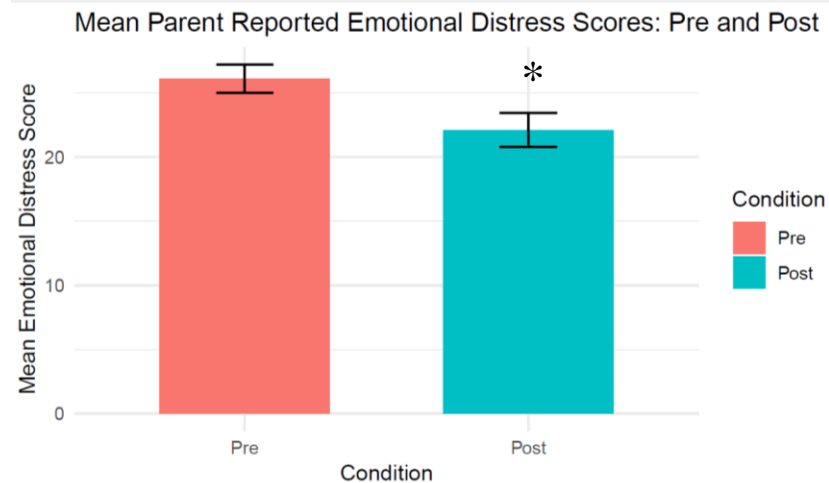
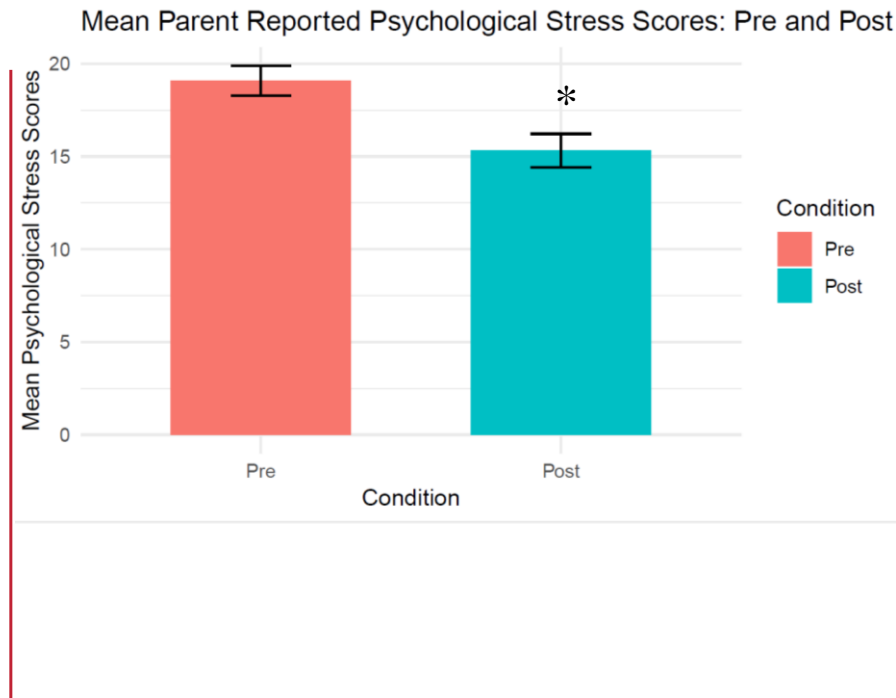
- 1) **How likely would you be to recommend Resilient Youth to another military family?**
  - a. Average: 9 (Range: 3-10)

**A. What did your child like most about this program?**

- The virtual aspect and the breathing exercises.
- The help understanding how to control his stress.
- Participating in the conversation and getting to share his views.
- I believe she enjoyed some of the content on regulating emotions and some different techniques she can use when she gets stressed out.

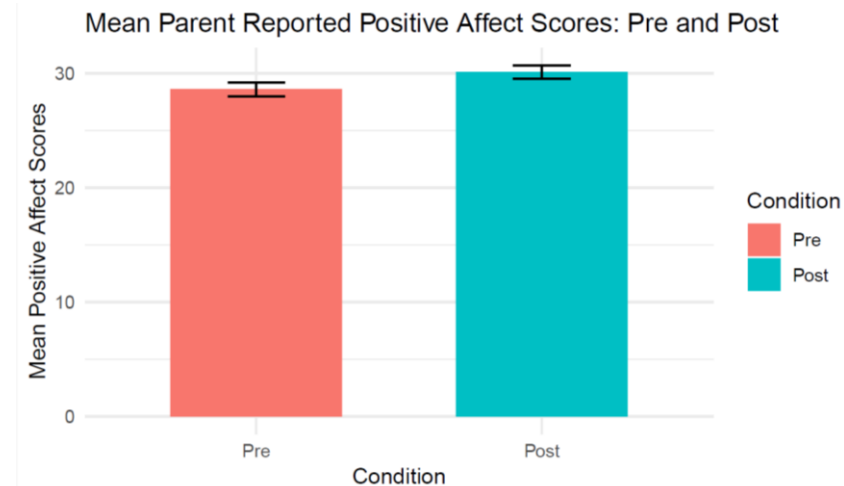
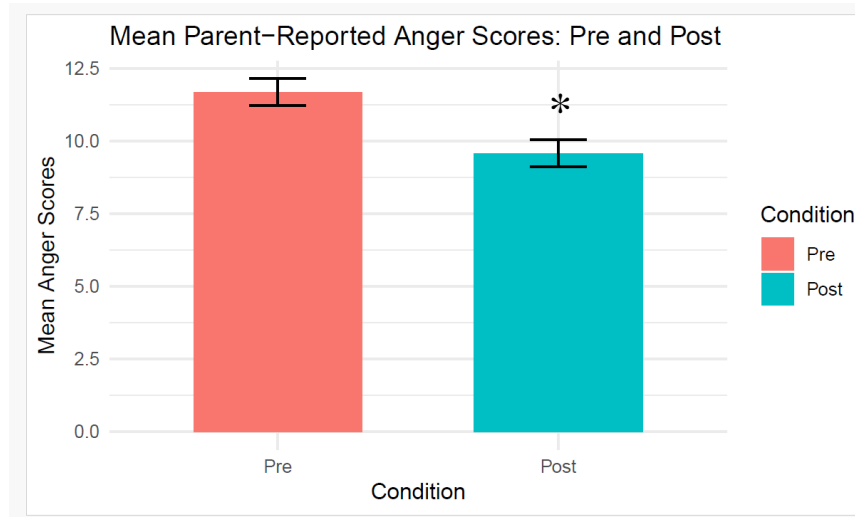
- “Thank you for your service to our military kids, they truly need this and it was enjoyable and helpful for us as parents participating with them.”

# PARENT-REPORTED IMPROVEMENT ACROSS MULTIPLE DOMAINS (N=66 PRE, 29 POST)



\*Denotes statistically significant change from pre- to post-group,  $p < 0.05$

# PARENT-REPORTED IMPROVEMENT ACROSS MULTIPLE DOMAINS (N=66 PRE, 29 POST)



\*Denotes statistically significant change from pre- to post-group,  $p < 0.05$

# NEXT STEPS

# COLLABORATIONS AND EXPANSION: PORTABLE AND PRACTICAL PROGRAMMING

- Partnerships with outside organizations:
  - Hope for the Warriors
  - Warrior for Life Foundation
  - HUMV
  - MA Guard Youth, Hanscom AFB
- Expansion:
  - Florida, PR
  - Arizona
  - Military Recruiters
  - Additional community organizations
  - And more to come!

# THANK YOU!

Please visit our website for more information and to register for any of our resilience programs!

<https://homebase.org/>

<https://homebase.org/programs/new-england-programs/resiliencyprograms/>



Their Mission Is Complete.  
Ours Has Just Begun.



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# Extra slides



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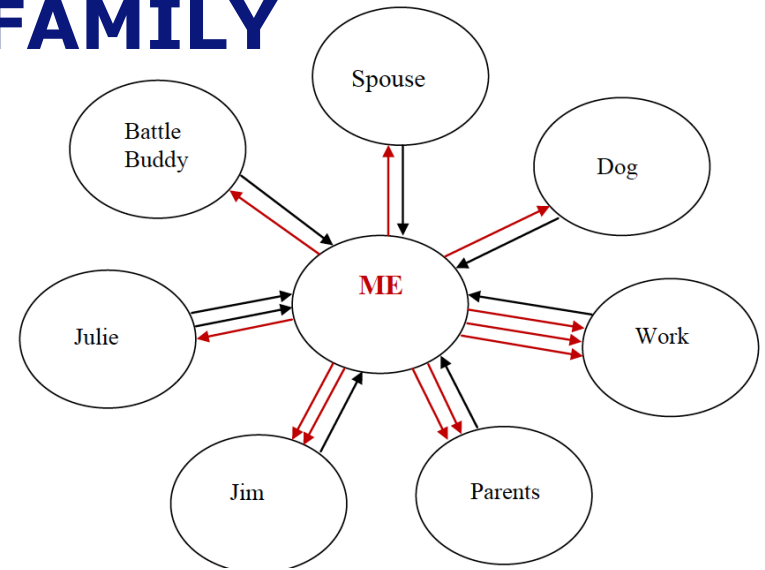
# RESILIENT WARRIOR/FAMILY CLASS 1

- Understanding the stress response
  - Identifying early signs of stress
- The Energy Battery
- Building resiliency
  - Commitment, control, challenge, connection
- Learning to elicit RR
  - Non-judgmental, mental focusing

Withdrawals (drain battery)	Deposits (charge battery)
<p>Busy day at work.</p> <p>Fought with my son.</p> <p>Ate lunch too quickly.</p> <p>Spent time organizing a get-together for a friend.</p> <p>Didn't get enough sleep.</p> <p>Had an argument with a family member.</p> <p>Did not have enough time to exercise.</p> <p>Worried about my weight.</p> <p>Was late for a meeting.</p> <p>Rushed around all day doing errands.</p> <p>Didn't feel well this morning.</p>	<p>Got thanked for helping a co-worker.</p> <p>Began reading a new book.</p> <p>Had a visit from military friend.</p> <p>Went to bed early this week.</p> <p>Exercised.</p> <p>Had a picnic in the park.</p> <p>Mindfully ate lunch.</p> <p>Saw a movie with friends.</p> <p>Enjoyed time with family.</p> <p>Did an RR practice?</p> <p>Took a walk in the morning.</p>

# RESILIENT WARRIOR/FAMILY CLASS 3

- Mindful awareness
- Review of stress warning signs
  - Physical, emotional, behavioral, emotional, cognitive, relational, spiritual
- Social Support
  - Emotional, informational, tangible, self-esteem/affirmational, belonging
  - How much support do you have?



## Physical Symptoms

- |     |                    |     |                       |
|-----|--------------------|-----|-----------------------|
| ___ | Headaches          | ___ | Back pain             |
| ___ | Indigestion        | ___ | Tight neck, shoulders |
| ___ | Stomach aches      | ___ | Racing heart          |
| ___ | Sweaty palms       | ___ | Restlessness          |
| ___ | Sleep difficulties | ___ | Tiredness             |
| ___ | Dizziness          | ___ | Ringing in ears       |

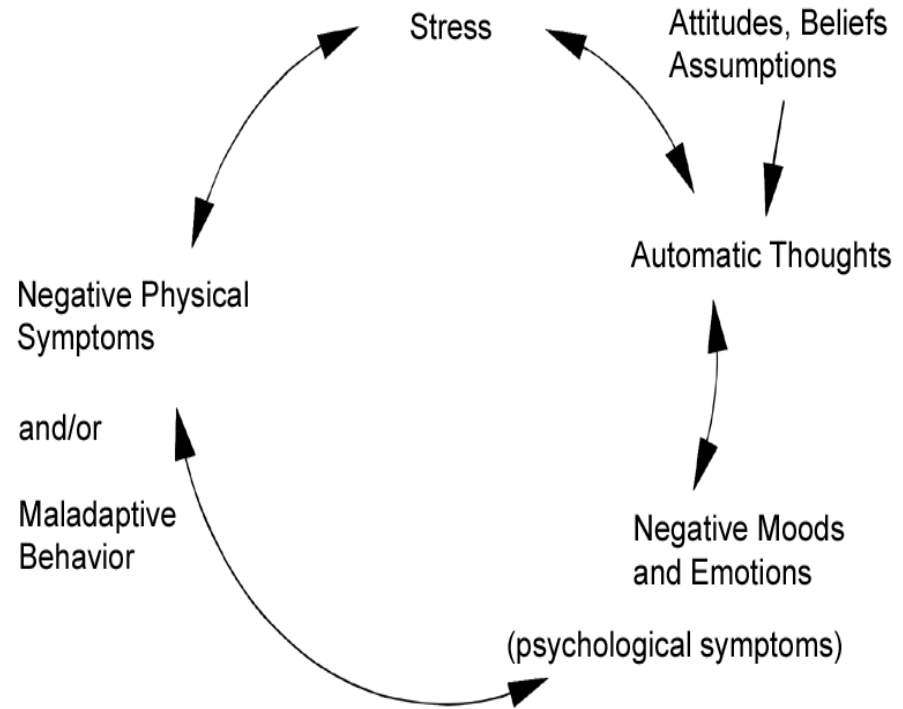
# RESILIENT WARRIOR/FAMILY

## CLASS 4

- “Chair Yoga”
- Changing thinking habits
  - Changes emotions
  - Changes behaviors

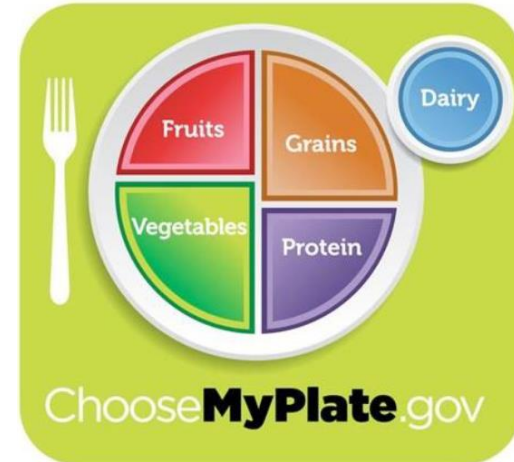


### The Negative Stress Cycle



# RESILIENT WARRIOR/FAMILY CLASS 5

- Creating adaptive perspectives
- What are our options?
  1. Change the situation
  2. Change how we think about the situation
  3. Accept the situation
  4. Do nothing, stay miserable
- Healthy Eating
- Exercise



## WARRIOR HEALTH AND FITNESS

A free program for Post-9/11 Veterans to improve health and well-being through supervised physical exercise, education about nutrition, sleep hygiene & stress management.

# RESILIENT WARRIOR/FAMILY

## CLASS 6

- Tips to effective communication
  - Being aggressive versus being assertive
- How to develop empathy for others
- Active listening
- Strategies to staying resilient

Listening  
=  
Learning

