

# "WE MUST REMEMBER THAT ONE MAN IS MUCH THE SAME AS ANOTHER, AND THAT HE IS BEST WHO IS TRAINED IN THE SEVEREST SCHOOL."

- THUCYDIDES



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Warrior PATHH is a peer-based training program that relies on a variety of educational and experiential activities for the purpose of teaching life skills, increasing community integration and involvement, and promoting physical, emotional, relational, financial, and spiritual health. Warrior PATHH is not an outpatient or residential clinical treatment program and does not offer any health care services including, but not limited to, use of licensed healthcare professionals in the delivery of programs or supervision of staff. Warrior PATHH does not involve the provision of health care of any kind including, but not limited to, individual, group, or family counseling or psychotherapy, pharmacological management, or medical interventions. Warrior PATHH is not offered as a substitute or replacement for health care services, which may be ongoing or needed at any time by program participants.





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## **EXECUTIVE SUMMARY**

We live in a nation filled with struggle, stress, hardship, and trauma. A suicide epidemic claims the life of an American every 11 minutes; and our core constituencies (service members, veterans, and first responders) are at far higher risk of suicide. This world is characterized best by Henry David Thoreau, who noted that: "The mass of men lead lives of quiet desperation. They honestly think there is no choice left."

When it comes to mental health, the prevailing narrative is one of diminishment, dysfunction, disconnection, and diagnosis. This narrative, and the failure of mainstream treatments to do anything but help people better endure suffering and feel less bad, leaves far too many of those struggling with the belief that they are destined for a diminished existence. This is a recipe not only for despair but suicide — which is precisely what we are seeing across all of the communities we serve.

In an effort to address the veteran suicide crisis, Congress passed the Commander John Scott Hannon Veterans Mental Health Care Improvement Act, which led the Department of Veterans Affairs to explore new, community-based approaches to veteran mental health care through the Staff Sergeant Parker Gordon Fox Suicide Prevention Grant Program (with two Warrior PATHH delivery organizations receiving grants). Despite this considerable progress, however, the VA's own numbers show that more work needs to be done to promote veteran mental health wellness. Their most recent data, derived from their study of veterans receiving VA services, indicate 6,146 veterans died by suicide in 2020 -- an average of 16.8 veterans per day.

According to Newsweek, the National Guard suicide rate rose by 35 percent in 2021.

First responder suicides have continued to surpass line of duty deaths for many years.

While suicide represents the ultimate failure of our systems of care and support, they do not sufficiently demonstrate the scale of the challenge. It is estimated that at least 30 percent of combat veterans and first responders are suffering in silence with a range of mental health challenges. The 2022 Wounded Warrior Project survey indicated that those numbers might be even higher, finding that more than 28 percent of veterans had suicidal thoughts within the past 12 months; 76 percent are battling PTSD and anxiety; and 72 percent depression.

What is required was made abundantly clear in the Journal of the American Medical Association (JAMA) back in August 2015: "new and engaging approaches for the treatment of PTSD are needed."

It was our early recognition of this truth that led Boulder Crest Foundation to begin the development of Warrior PATHH in May 2014. This followed the opening of Boulder Crest Virginia, the nation's first-ever wellness center dedicated to combat veterans and their families in September 2013, and witnessing first-hand the failures of traditional approaches.

Our objective was to ensure that combat veterans and first responders had the training, skills, and support they needed to thrive in the aftermath of trauma, transforming struggle into strength and lifelong Posttraumatic Growth (PTG).

Warrior PATHH represents the first-ever program designed to cultivate and facilitate PTG amongst the military and veteran community. PTG is a decades-old science that provides a framework for transforming times of deep struggle into profound strength and lifelong growth.

After nearly nine years of hard work on Warrior PATHH, four things are clear:

- 1. The current mainstream approach to mental health is not working.
- 1. The current mainstream approach to mental health is not working. These are not our words, but the expert opinions of luminaries from the mental health community. Dr. Thomas Insel, former director of the National Institute of Mental Health, asked, "Are we somehow causing increased morbidity and mortality with our interventions?" In January 2017, JAMA Psychiatry stated that "These findings point to the ongoing crisis in PTSD care for service members and veterans. Despite the large increase in availability of evidence-based treatments, considerable room exists for improvement in treatment efficacy, and satisfaction appears bleak based on low treatment retention...we have probably come as far as we can with current dominant clinical approaches."
- 2. Combat veterans and first responders represent the strongest and finest among us.
- 2. Combat veterans and first responders represent the strongest and finest among us. These Warriors possess skills, strengths, and abilities that are seldom seen and desperately needed. This notion is best captured in the words of Thucydides, an Athenian General and historian, who famously wrote the History of the Peloponnesian War: "We must remember that one man is much the same as another, and that he is best who is trained in the severest school."

- 3. Our nation's Warriors need training not treatment to thrive.
- 3. When we provide combat veterans and first responders with the opportunity to take a knee and receive training that allows them to harness their strengths and abilities, they can live the great lives they deserve – full of passion, purpose, and service.
- 4. Struggle can catalyze growth and transformation.
- 4. Times of deep struggle, and even despair, can serve as the gateway to a life that is authentic, fulfilling, and purposeful. This idea that what does not kill you can in fact make you stronger and wiser is the basis of Warrior PATHH, and is derived from the science known as PTG.

In 2015, two world-class psychologists – Dr. Richard Tedeschi and Dr. Bret Moore – agreed to evaluate Warrior PATHH. The two psychologists reported that the progress they were witnessing was unheard of, and began reflecting on how to assess the effectiveness of the program with a view towards ensuring it could become an evidence-based standard.

Given their observations, the next step was clear: we must develop the nation's first-ever curriculum designed to cultivate and facilitate Posttraumatic Growth amongst combat veterans. This curriculum would enable Warrior PATHH to be codified, documented, proven, and most significantly, scaled to help combat veterans and first responders from across the country, and possibly the world.

In January 2016, the Marcus Foundation invested \$1.05 million to make this vision a reality. This investment focused on two areas of work: the development of the curriculum and an 18-month program evaluation of eight pilot programs, conducted by Dr. Tedeschi and Dr. Moore, to assess the effectiveness and impact of Warrior PATHH.

The 18-month program evaluation demonstrated that Warrior PATHH works significantly better than traditional approaches. Warrior PATHH doesn't only reduce symptoms substantially; it enables students to live the great lives they deserve. Warrior PATHH unlocks the value of military and first responder training and experience, and allows our Warriors to be the calm, connected, and congruent leaders desperately needed in their families, communities, and country.

Based on these results, Boulder Crest Foundation opened our Arizona PTG Academy in 2018, and demonstrated that Warrior PATHH was scalable.

In 2019, we joined with the Avalon Fund (now the Avalon Action Alliance), to build a national network of partners delivering Warrior PATHH. At the end of 2022, this network comprised nine teams in eight states, and the number of Warrior PATHH programs delivered grew from 18 in 2018 to 105 in 2022. We anticipate delivering 133 programs in 2023.

At the heart of what makes Warrior PATHH successful and differentiates the program from the status quo approaches is best reflected in the words of Goethe: "If we treat people as they are, we make them worse. If we treat people as they ought to be, we help them become what they are capable of becoming."

# "IF WE TREAT PEOPLE AS THEY ARE, WE MAKE THEM WORSE. IF WE TREAT PEOPLE AS THEY OUGHT TO BE, WE HELP THEM BECOME WHAT THEY ARE CAPABLE OF BECOMING."

GOETHE

Far too many of the men and women who serve on the frontlines of our society — at home and abroad — are said to be essential but are left feeling disposable. They believe that the cost of their service to community and country is the quality of their lives; this cannot continue. We can and must do better.

We must never forget that combat veterans and first responders possess strengths, skills, and abilities that are seldom seen and desperately needed. It is our responsibility to understand how to harness those strengths and abilities, and enable this remarkable community of heroes to live great lives — filled with passion, purpose, service, growth, and connection.

Together, we can ensure this happens. Join us.

Josh Goldberg

CEO

Boulder Crest Foundation Author, Struggle Well:

Thriving in the Aftermath of Trauma



## WHAT IS WARRIOR PATHH

Warrior PATHH (Progressive and Alternative Training for Helping Heroes) is the first training program ever designed to enable our nation's combat veterans and first responders to transform deep struggle into profound strength and lifelong Posttraumatic Growth (PTG). Warrior PATHH is a 90-day, non-pharmacological, peer-delivered training program that begins with a 7-day intensive and immersive initiation delivered across the United States.

Warrior PATHH was developed by the Boulder Crest Foundation, a national nonprofit organization working to ensure that service members, veterans, first responders, and their families can live great lives in the aftermath of stress, struggle, and trauma. Warrior PATHH was developed in collaboration with Dr. Richard Tedeschi, the founder of PTG, and Dr. Bret Moore, a twice-deployed Army psychologist.

#### What is Posttraumatic Growth?

Posttraumatic Growth is the basis of Warrior PATHH and reflects thousands of years of understanding, decades of research, and years of application and operationalization at Boulder Crest. The science of PTG suggests that it is during times of deep struggle that people are likely to engage in reflection and introspection, and carefully consider what is truly valuable and significant in their lives. As a result, growth is often witnessed in some or all of five areas:

- New Possibilities: The sense that new opportunities have emerged from the struggle, opening up possibilities that were not present before.
- **Deeper Relationships:** Experiencing closer relationships with specific people, and an increased sense of connection with others who suffer.
- **Personal Strength:** An increased sense of one's own strength "If I lived through that, I can face anything."
- Appreciation for Life: A sense of gratitude for the small and large things in life.
- **Spiritual and Existential Change:** A deepening of their spiritual lives; and an exploration of beliefs and notions previously unconsidered.

"YOU HAVE TO KNOW THAT POSTTRAUMATIC GROWTH EXISTS IN ORDER FOR IT TO HAPPEN. YOU HAVE TO KNOW ITS OKAY FOR GOOD THINGS TO HAPPEN AFTER REALLY BAD THINGS."

— MANDY PIFER, WHOSE FIANCÉ WAS KILLED IN A 2015 ISIS-RELATED SHOOTING



#### Why Does It Work?

Warrior PATHH is based on the proven framework of PTG, and trains students in the five phases of PTG, built on an environment of trust and connection:

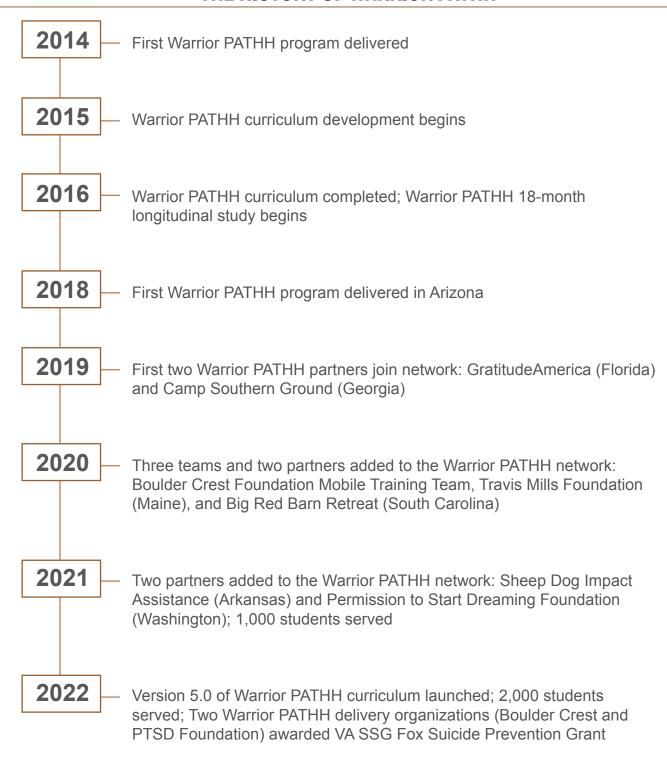
- **Education:** Identify the impacts of stress and trauma; examine the ways in which struggle can lead to opportunities for growth and transformation.
- **Regulation:** Develop mind, body, financial, and spiritual wellness practices to regulate thoughts, feelings, and actions.
- **Disclosure:** Devise ways to self-disclose personal experiences with struggle that are effective in strengthening interpersonal relationships.
- **Story:** Create a positive, forward-looking personal story that integrates past, present, and future.
- **Service**: Develop a plan for a new mission of service to themselves, their family, work, community, and country.

#### Warrior PATHH = Sustained Transformation

The purpose of Warrior PATHH is to enable students to achieve sustained and life-changing transformation. To that end, Warrior PATHH is a 90-day intensive program that begins with a 7-day initiation, followed by 12 weeks of ongoing training, support, and accountability. This includes five team video conferences led by a PATHH Guide, daily content, private team pages with messaging capabilities, and additional courses, support, and community made possible by the myPATHH app, which features mobile and desktop versions. Warriors have lifetime access to myPATHH to enable continued engagement and interaction with their peer community.



## THE HISTORY OF WARRIOR PATHH

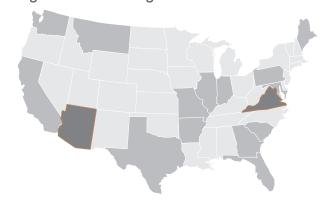


## THE WARRIOR PATHH NETWORK

#### The Warrior PATHH Network is made possible by the



As the home of Posttraumatic Growth, Boulder Crest began the development of Warrior PATHH in 2014 at Boulder Crest's Virginia PTG Academy. In 2018, Boulder Crest expanded the delivery of Warrior PATHH to our Arizona PTG Academy. In 2019, Boulder Crest began working with the Avalon Action Alliance on a national expansion effort designed to transform lives and revolutionize how we support struggling combat veterans and first responders. At the end of 2022, there were permanent teams delivering Warrior PATHH in nine states, with the Boulder Crest Foundation Mobile Training Team delivering Warrior PATHH at sites across the country.















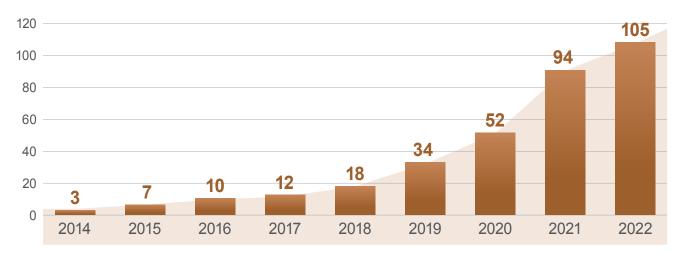




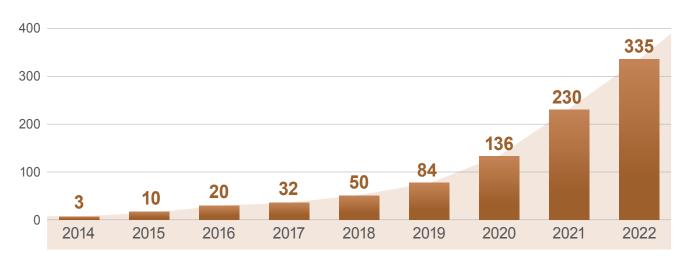
## WARRIOR PATHH BY THE NUMBERS (2014-2022)

The first-ever Warrior PATHH was delivered at Boulder Crest Foundation's Virginia PTG Academy in June 2014. Since then there has been dramatic expansion, fueled by the Avalon Action Alliance's investment in the Warrior PATHH network. We have now delivered 335 programs to 2,193 students; it took approximately seven years to serve 1,000 Warriors; 18 months to serve 2,000; and we will cross the 3,000 mark in less than 12 months.

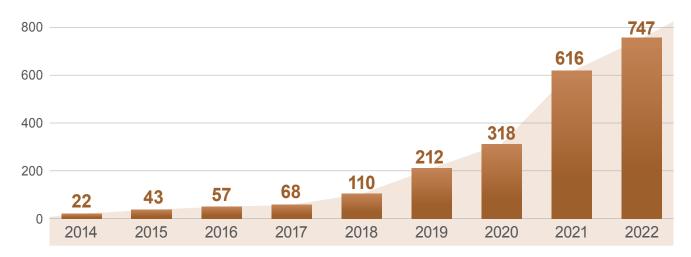
#### **Programs Delivered (by year)**

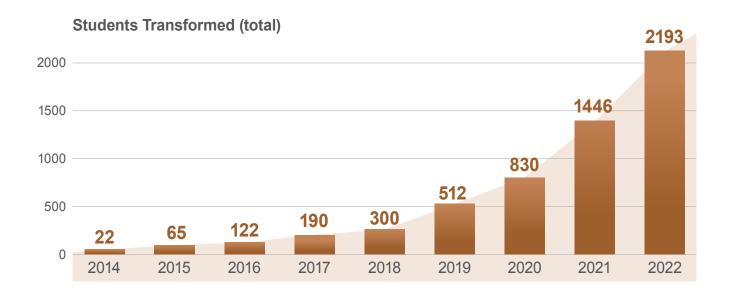


### **Programs Delivered (total)**



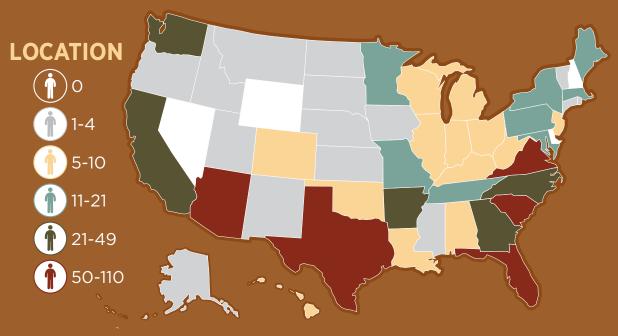
#### **Students Transformed (by year)**

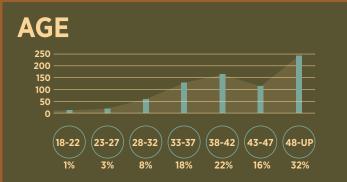


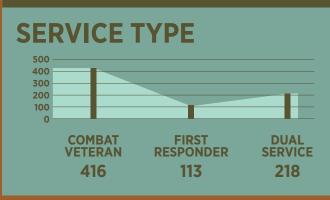


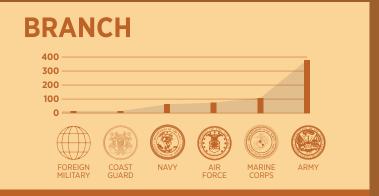
## **WARRIOR PATHH 2022: WHO WE SERVED**

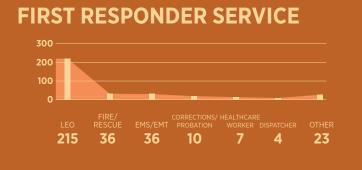
In 2022, the nine Warrior PATHH teams served 215 first responders across 105 programs delivered in 14 states. These students came from 46 states.



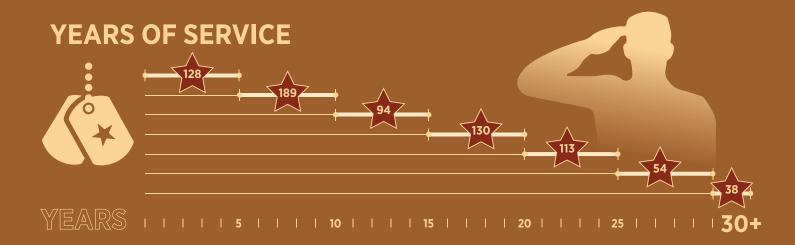












## **MARITAL STATUS**

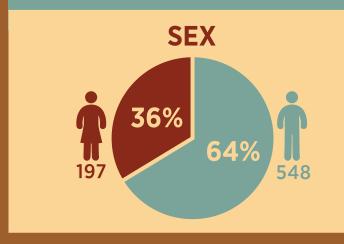
Married
Divorced
Never Married
Married, Separated
Widowed

**††** 422 **1**/**1** 178

**أ** 95

**†** †

**†** 7



## **EMPLOYMENT**

398 Employed



21 Student

219 Retired



115 Unemployed



**SERVICE INJURY** 



ES

NO

PSYCHIATRIC DIAGNOSIS

(174)

NO



YES

PREVIOUS PSYCHIATRIC TREATMENT



YES

NO

PREVIOUS ALCOHOL TREATMENT



129 YES TBI DIAGNOSIS



558

YES

NO

SUICIDAL IDEATION IN LAST YEAR

YES **436** 

NO 311

NO

# TRANSFORMING LIVES: THE IMPACT OF WARRIOR PATHH IN 2022

## **QUANTITATIVE DATA (n=747)**

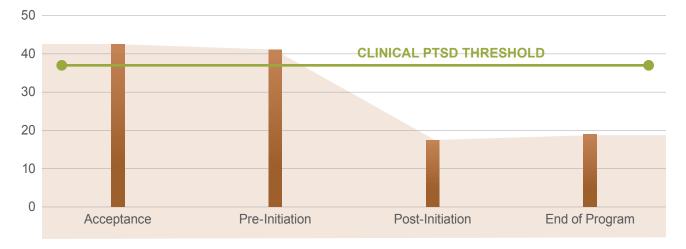
We evaluate Warrior PATHH's efficacy using a combination of publicly available clinical instruments and proprietary measures. These are designed to measure the impact of Warrior PATHH in three domains: Symptom Reduction, Quality of Life Improvement, and Posttraumatic Growth. In 2022, we utilized the fifth edition of the Warrior PATHH curriculum, and adapted the full program evaluation instruments utilized in the 18-month longitudinal study (2016-2018). There were four collection points: (1) upon acceptance into Warrior PATHH; (2) upon arrival at the 7-day Initiation; (3) at the conclusion of the 7-day Initiation; (4) and at the conclusion of the 90-day program.

## **QUANTITATIVE EVALUATION**

## SYMPTOM REDUCTION: PTSD CHECKLIST (PCL-5)

#### **Average PCL-5 Score**

Warrior PATHH students experienced a 58% sustained reduction in PCL symptoms, falling well below the clinical threshold.



#### **Explanation of Instrument**

The PCL-5 is a 20-item self-report measure that assesses the 20 DSM-5 symptoms of PTSD. The PCL-5 has a variety of purposes, including: Monitoring symptom change during and after treatment; Screening individuals for PTSD; Making a provisional PTSD diagnosis.

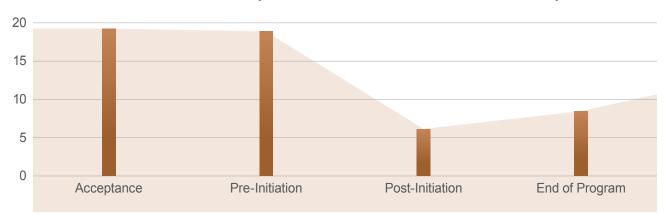
#### **Rationale for Usage**

Almost all traditional military and veterans clinical programs measure the presence and severity of PTSD and use it as a means of monitoring the efficacy of treatments specific for PTSD (e.g., prolonged exposure, cognitive processing therapy, eye movement desensitization and reprocessing). It is important that Boulder Crest do the same if it plans to draw comparisons between the efficacy of the Warrior PATHH program and traditional clinical interventions.

## **SYMPTOM REDUCTION: DASS-21**

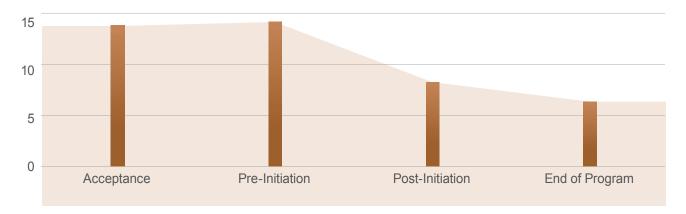
## **DASS-21 Depression**

Warrior PATHH students experienced a sustained 58% reduction in depression.



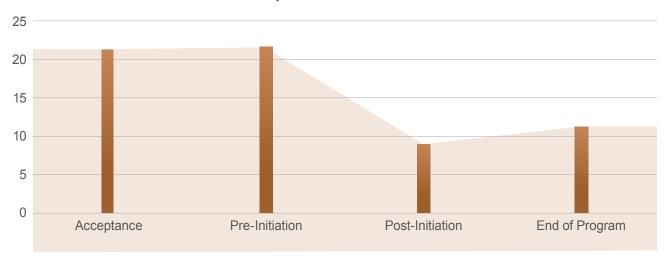
## **DASS-21 Anxiety**

Warrior PATHH students experienced a sustained 56% reduction in anxiety.



#### **DASS-21 Stress**

Warrior PATHH students experienced a sustained 51% reduction in stress.



#### **Explanation of Instrument**

The short form of the DASS is a 21-item self-report measure with 3 subscales (Depression, Anxiety, and Stress), and includes statements that address how subjects have felt during the past week, such as "I found myself getting agitated" and "I felt that life was meaningless." All items are rated on a 4-point Likert scale, ranging from 0 ("Did not apply to me at all") to 3 ("Applied to me very much, or most of the time"). Together, the three subscales provide a summed score of overall distress (Cronbach's  $\alpha$  = .93). (Henry and Crawford, 2005).

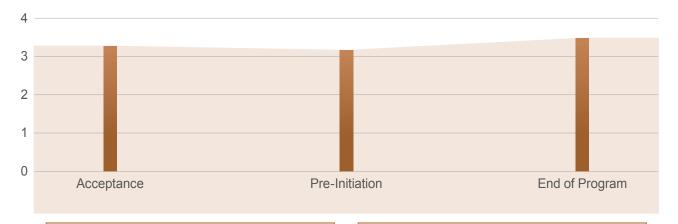
#### Rationale for Usage

In addition to being a brief measure of the most common symptoms of psychological problems, the DASS also can indicate response to treatment.

#### QUALITY OF LIFE IMPROVEMENT: PHYSICAL ACTIVITY

## **Physical Activity**

Warrior PATHH students experienced a 13% improvement in physical activity.



#### **Explanation of Instrument**

Developed by Dr. Tedeschi and Dr. Moore for the Program Evaluation.

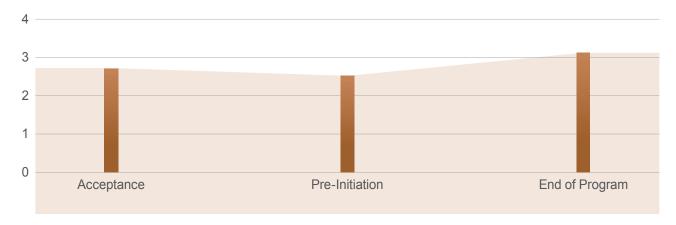
#### **Rationale for Usage**

Increased physical activity may increase energy, concentration, and emotional well-being. Warrior PATHH encourages physical activity due to the setting and the outdoor activities.

## **QUALITY OF LIFE IMPROVEMENT: NUTRITION**

## **Nutrition**

Warrior PATHH students experienced a 14% improvement in nutrition.



#### **Explanation of Instrument**

Developed by Dr. Tedeschi and Dr. Moore for the Program Evaluation.

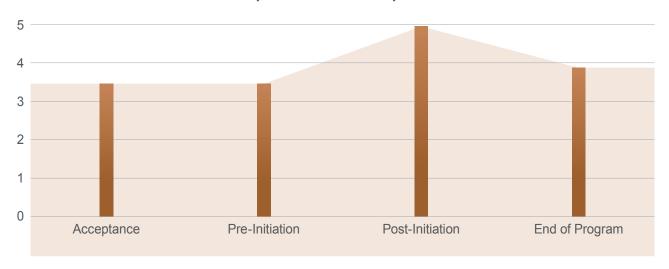
#### **Rationale for Usage**

Attention to healthy eating at Warrior PATHH may affect the choices participants make and the eating habits they develop after returning home. Good nutrition can affect emotional as well as physical health.

## **QUALITY OF LIFE IMPROVEMENT: FINANCIAL WELLNESS**

## **Financial Wellness**

Warrior PATHH students experienced a 13% improvement in financial wellness.



#### **Explanation of Instrument**

Developed by Dr. Tedeschi and Dr. Moore for the Program Evaluation.

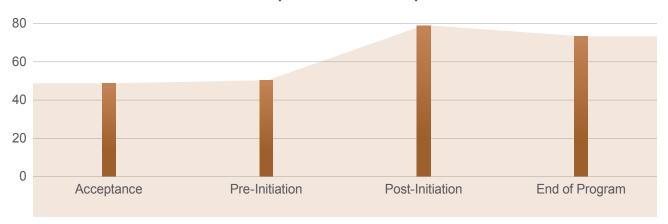
#### **Rationale for Usage**

Good financial decisions are a goal of the Warrior PATHH program, and can reduce stress over time.

#### POSTTRAUMATIC GROWTH: PTGI-X

### **Posttraumatic Growth Inventory**

Warrior PATHH students experienced a 56% improvement in PTGI scores.



#### **Explanation of Instrument**

The Posttraumatic Growth Inventory-Expanded (PTGI-X) (Tedeschi, Cann, Taku, Senol-Durak, & Calhoun, 2017). The PTGI-X is a 25-item scale that measures the extent to which individuals report positive psychological change as a result of experiencing a traumatic event, and is based on the original measure (Tedeschi & Calhoun, 1996). The degree to which individuals experience change is assessed in five domains, which include: New Possibilities ("I established a new path for my life"), Personal Strength ("I discovered that I'm stronger than I thought I was"), Deeper Relationships ("A sense of closeness with others"), Spiritual-Existential Change ("A better understanding of spiritual matters"), and Appreciation of Life ("I have a greater appreciation for the value of my own life"). The PTGI-X is based on the original 21-item PTGI except that it adds items representing existential change. It utilizes a 6-point Likert response format, with item scorings ranging from 0 ("I did not experience this change as a result of the event") to 5 ("I experienced this change to a very great degree as a result of the event").

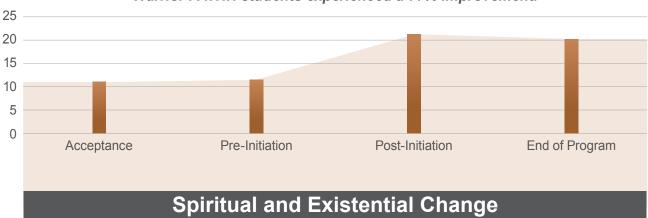
#### Rationale for Usage

As a core basis of the Boulder Crest philosophy and program content, PTG must be assessed.

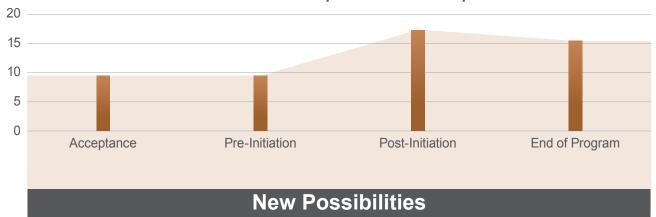
#### POSTTRAUMATIC GROWTH: PTGI-X

## **Deeper Relationships**

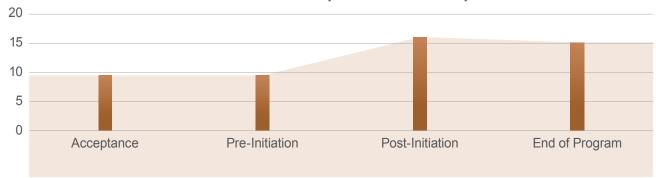
#### Warrior PATHH students experienced a 77% improvement.



#### Warrior PATHH students experienced a 66% improvement.



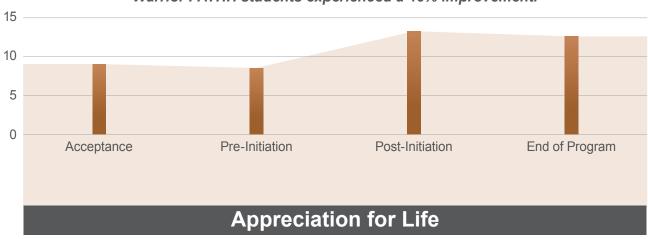
#### Warrior PATHH students experienced a 64% improvement.



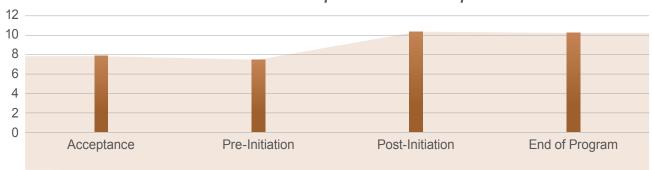
## **POSTTRAUMATIC GROWTH: PTGI-X**

## **Personal Strength**

#### Warrior PATHH students experienced a 46% improvement.



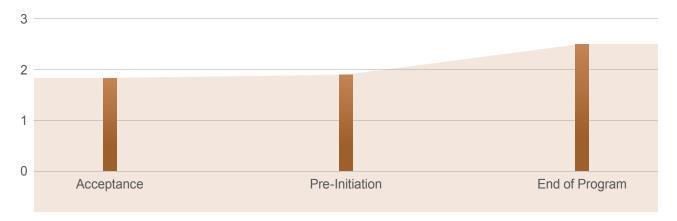
#### Warrior PATHH students experienced a 25% improvement.



#### POSTTRAUMATIC GROWTH: ACTIVE READING

## **Active Reading**

Warrior PATHH students experienced a 33% improvement in reading.



#### **Explanation of Instrument**

Developed by Dr. Tedeschi and Dr. Moore for the Program Evaluation.

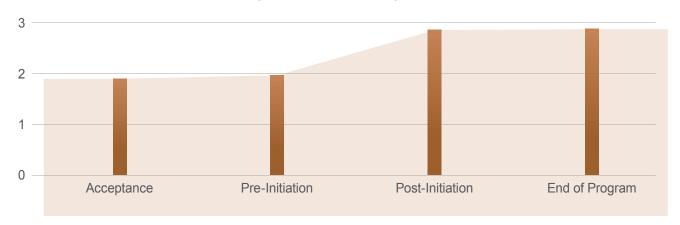
#### Rationale for Usage

Recent research (Tsai, El-Gabalawy, Sledge, W., Southwick, & Pietrzak, 2015) has shown that those who have experienced combat who actively engage in reading have better outcomes and this has been associated with growth after trauma. The Warrior PATHH experience may produce more openness and interest in learning and knowing.

#### POSTTRAUMATIC GROWTH: TRAUMA RESOLUTION

#### **Trauma Resolution**

Warrior PATHH students experienced a 40% improvement in trauma resolution.



#### **Explanation of Instrument**

The Trauma Resolution Item is an attempt to discern the degree to which core beliefs are being reconstructed, since PTG is based to a large extent on the challenge to core beliefs.

(Triplett, K. N., Tedeschi, R. G., Cann, A., Calhoun, L. G., & Reeve, C. L. (2012). Posttraumatic Growth, meaning in life, and life satisfaction in response to trauma.

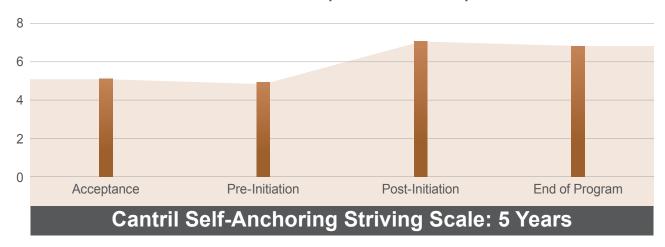
#### **Rationale for Usage**

The Trauma Resolution Item is designed to discern the degree to which core beliefs are being reconstructed or not, since PTG is based to a large extent on the challenge to core beliefs and their reconstruction into a new view of self, world and future.

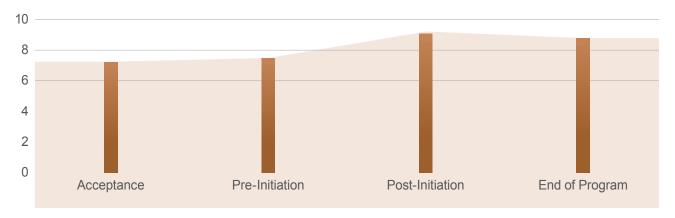
#### POSTTRAUMATIC GROWTH: CANTRIL SELF-ANCHORING STRIVING SCALE

## **Cantril Self-Anchoring Striving Scale: Today**

Warrior PATHH students experienced a 49% improvement.



Warrior PATHH students experienced a 17% improvement.



#### **Explanation of Instrument**

The Cantril Self-Anchoring Striving Scale, known as the "Cantril Ladder," asks respondents to think of a ladder, with the best possible life for them being a 10 and the worst possible life being a 0. They are asked to rate their own current lives on that 0 to 10 scale. (Cantril, H., 1965)

#### **Rationale for Usage**

The "Cantril Ladder" is a brief, visual tool for measuring general wellbeing, mental health, and happiness. Specifically, it asks the respondent to reflect on where things stand for them in their present life versus how they see themselves in the future.

# TRANSFORMING LIVES: THE IMPACT OF WARRIOR PATHH IN 2022

#### **QUALITATIVE DATA**

In addition to the quantitative measures noted above, Warrior PATHH utilizes qualitative questions that enable students to share how the program impacted them. This occurs at the end of the 7-day Initiation and at the conclusion of Warrior PATHH (90 days).



## Think about how this week has impacted you. Describe the ways in which you have changed and grown over the last seven days?



I feel worthy of living and being with others for my well-being, not just theirs. Started to believe the positive words with no negative thoughts. The world can be a place I can fit into. The past is behind me, it's time for me to let go and move forward. The world needs different and that's me.

I was able to grieve and was allowed to be myself without judgment. I was able to face past hurts and leave them behind and stop carrying the burden of them. I was given tools to be able to handle my stress and allow my mind to rest, recharge, and unwind. I was given a renewed hope.

This week was truly transformational. My heart is open and my mind is strong. I am walking away with wellness practices that I am excited to use and gratitude in my heart!

I have been able to let go of a lot, if not all, of my pain, guilt and shame of my past, and feel as if I have been reborn.

I feel a serene peacefulness I have never experienced.

I feel that over the course of the last seven days, I have learned a new sense of meaning and have learned to achieve a state of relaxation that I did not know was possible. I feel that I have learned to be open and honest with myself, as well as exhibit grace which is something that I was unable to comprehend, prior to attending this program. I feel that I have the knowledge to return to my home life, and take care of myself emotionally, physically, and spiritually which is something that I had not been able to successfully do, up until this point.



How has participation in the Warrior PATHH program caused you to reconsider how you view your past experiences as well as how you now view your life going forward?



The past cannot hurt me anymore. Those who caused pain are no longer present. I've learned to drop the bag that has weighed me down for too long. The person inside of me who I like can and will resurface. Take it slow and be patient, it's okay.

That the past was just a part of my life and that it doesn't define me or who I will become and be in the future.

I view my past experiences as things that I needed to go through to contribute to becoming strong and moving forward. I no longer look at my trauma as a burden, but as a chapter in my book of life. My past formed me into who I am today and I am proud of who I am now. I have recognized why I behave the way I do and where I need to work. I am excited to put up boundaries and tell myself that I CAN do anything.

I understand that my past was part of the training I received in life and impacted the way I thought about myself and the world. I left the burdens of my past at the labyrinth. I view my life as a blessing and I am excited to thrive and be of service to others.

I am more than my injuries and my injuries do not have to control my self worth or happiness.



## What do you think your future would look like if you never attended Warrior PATHH?



Maybe dead. Maybe divorced. Definitely empty inside.

There would have been a memorial service for me. I would not be alive today had I not been accepted when I was.

Dark and dim. I would have continued a path of self destruction and blaming others.

Repetitive cycle of depression, suicidal thoughts, anger bursts, unhappiness, and self sabotaging behaviors.

I would be dead. This was my last try at trying to figure things out. My sons need me healthy!

A ship without a rudder.



# What do you believe will be your most significant challenge going forward after you leave today?



Discipline and continuing to motivate myself daily and staying focused on the plan.

Being consistent and keeping the connections I made here.

Staying true to myself and remembering I left my past at the labyrinth.

Living for myself for a change.

Rolling with many major life changes that are occurring all at once. However, I am confident I can maintain perspective and hope much better now.

Making sure to check in with myself. Not feel guilty about making changes or cuts where I need to in order to practice self care for long-term growth. Pruning my environment in order to support my growth.



## What support and resources do you believe would help you overcome these challenges?



I love the app and am excited to use it as a resource.

Just knowing that I am loved and people are thinking of me. I need to know I am making an impact.

Future events with other graduates to keep the momentum and reminders going.

The app will be a huge help in doing this, and those I love that surround me on a daily basis.

Maintaining contact with my fellow PATHH warriors, and continuing the new routines I learned here this week.

This network of friends, accountability, and an occasional reminder to let what's laid here stay here.



If you were asked by a friend, family member, or co-worker to describe your experiences during Warrior PATHH, what would you say?



It helped me take the experiences that haunted me my whole life and turn them into learning experiences and strength.

Life changing in the best way. If you are given this opportunity, please take it. This is not something anyone will ever regret attending.

One of the best decisions of my life. Eye opening, enlightening, empowering, and life changing.

A eye opening change that allowed me to not be weighed down by my past. A place I can be vulnerable and understand life happens — just struggle well in it and enjoy the moments.

I would explain to them that it was a profound experience in its entirety, and that I finally was able to unpack my ruck sack which had been weighing me down since the time that I was a child.

Amazing, saved my life.



In what ways do you believe you will make the biggest positive impact on your family, community, and country going forward? In other words, how will you make the world a better place?



To me it's a simple answer: by being a little bit better each day.

I will be more involved with suicide awareness and I will be the husband my wife deserves.

Sharing my story telling others they're not alone.

I'll make the world a better place by giving back to my community by providing services and volunteering and sharing my story. I am going to focus more on me. I have never taken care of myself. I am so focused on the externals that I had forgotten about the person in the mirror. I know that if I focus more of my energy on myself it will ripple positive effects to my family and friends, community and further. Butterfly effect.

I believe that it starts with gratitude and maintaining the ideology that everyone I cross paths with is going through some sort of struggle and they deserve to be treated as such. I will continue to promote my experience in the program through my change in attitude and beliefs about myself.



## **TESTIMONIALS**

Ryan was suffering from a string of failed relationships, anger issues, feeling lost, not good enough for himself or anyone else, and in a constant emotionless state for 10 years.

Ryan served as a Security Forces Specialist in the United States Air Force, with deployments to Iraq, Afghanistan, and Kuwait. Upon leaving the Air Force, Ryan boxed up all of his traumas and put his military skills to work. He sought out jobs training and coaching others, but the whole time never helped or led himself.

After 10 years, Ryan was burned out, rundown, and consumed by a constant feeling of hopelessness. By now he had found a wife who saw the value in him and urged that he attended therapy. He had sought mental health treatment in the past but never understood why he felt the way he did and had very little faith left in the system.

One day, in 2019, his wife came home and told him about a new program she just heard about; Warrior PATHH. Realizing it was finally time that he asked for help, he applied.

Ryan felt that Warrior PATHH was not for the weak or uncommitted. The program required grit, determination, and perseverance in order for Ryan to walk the path. After a lot of tears, pain, and inward reflection, Ryan found what he had been searching for all along: growth and true self-discovery.

He began to feel again, learned it's ok to ask for help and that he is allowed to fail and repeat if necessary; most importantly, he learned how to connect with others. This program was Ryan's rescue boat, his extraction off the battlefield.

Ryan continues to grow while serving others. He has led other Warriors around him to Warrior PATHH so they can get the help they deserve.

Jason is a Master Sergeant (E8) in the United States Army serving as a Brigade Signal Chief. Jason has been serving for 19 years with a view towards retirement only a year away.

Prior to attending Warrior PATHH, Jason struggled in numerous areas of his life. When asked how he was doing, Jason would always respond with the following: "Another day closer to death."

Jason always thought that statement was acceptable and that it was simply a joke. It wasn't until he was at Warrior PATHH that he realized it was his true feeling of what he wanted to happen daily. He was tired of living a life of hopelessness and believed that death was a way out. For over 15 years, he lived in a perpetual state of fear. He feared the loss of anyone close to him, so he consistently decided to not pursue friendships with anyone.

Jason was at a session with his Behavioral Health Psychologist when he first heard of Boulder Crest. His psychologist told Jason that she was good at her job but that she knew of a program that was better at dealing with individuals with severe PTSD. The next day Jason was on the phone with a representative from Warrior PATHH and a week later he was in the program.

Jason had spent nearly 20 years in the military feeling like he couldn't speak to anyone about the issues he had simply because he felt no one would understand. While attending Warrior PATHH, Jason was introduced to Team Members and his own teammates that shared similar experiences and thought processes. For the first time in over a decade, he felt like he had friends and even family that he could reach out to and speak about what was truly going on in his life. He was able to connect with each and every one of his teammates during the in-person week of Warrior PATHH and now has a group of guys that are always a phone call or text away. Previously, Jason would disassociate himself with everyone the moment he left a duty station, deployment, etc. The practices/methods taught made sense and he learned how to take back the life he had given away to fear.

Jason's goals for the future are never ending. He is becoming a good husband and a great father. He is interested in different career paths, and curious about various hobbies that he has started developing. He is excited about life. Prior to Warrior PATHH, he didn't see a future at all and now so many ideas of a future dwell inside of him. He would most certainly recommend Warrior PATHH to his fellow struggling service members.

Growing up in California, Linda's early life was awesome. This changed at age 6 when her parents divorced. Her dad did everything he could to stay living close to remain in her and her sister's lives. However, her mom — an alcoholic and addict — brought many strangers home, which led to abuse. No matter how many times she reported the abuse or provided proof, her mother refused to believe her and did nothing to stop it. Her dad passed away and they moved to a new city. The abuse got worse, but thankfully a bus driver and her husband saw the scars, made some calls and Linda was placed into foster care. Although the foster care system was ok, it never gave her the love needed to grow. Her uncle in North Carolina found out she was in foster care, and he started the process to get custody of her even though they had never met. Here, Linda started to see the importance of love, friends, commitment, and trust. After graduating high school, Linda served four years in the Air Force, being the first female in the Carpenter Shop at McChord AFB.

After the Air Force, Linda began her state employment, starting as a janitor and finally achieving her dream of becoming a state trooper. With the combined daily effects of the job, traumatic childhood experiences, and toxic family members, her every day struggles got worse. She began to withdraw and abuse alcohol. Never wanting to show weakness, she put on her mask and struggled in silence. She continued to "suck it up buttercup" and despite trying many things to ease the burden, nothing helped. It started to become obvious to some — she needed help. Unexpectedly, one of her father figures died while on vacation, and then less than a month later, the uncle who pulled her out of foster care passed. One of her former retired sergeants reached out and suggested Warrior PATHH. A week later, a friend in the area also suggested Warrior PATHH. Both happen to be PATHH guides, and they could see her hurt and loss. During this time, she found out the dad that raised her was not her biological father and her mother still refuses to tell who her real father is.

Linda reports that hitting rock bottom is an eye opener and that being sober was one thing, but being happy at the same time was a challenge. Others can think you have your perfect life, but none know the struggles unless you tell them. As Linda started to realize she was only waking up to fix others while ignoring herself, she understood that she had lost her hope and her purpose. Linda attended Warrior PATHH, and is now thriving because of the quality practices, her commitment to use them daily, and accountability provided by her cohort of 7 other soul sisters.

# "I am not only happy, but I am also living my best life as retirement approaches." -Linda A.

Linda has also found that having her 7 "soul sisters" as a strong support network helps her immensely in her daily life. She is also now able to initiate conversation with others about struggle and about asking for, and accepting, help.

Linda is actively assisting others by volunteering with the PNW PATHH program, planning to start a comfort dog program within her agency after retirement, and continuing to utilize ALL practices learned.

# JOURNAL ARTICLE ON WARRIOR PATHH: PRACTICE INNOVATIONS

# A PRELIMARY EXAMINATION OF A POSTTRAUMATIC GROWTH-BASED PROGRAM FOR VETERAN MENTAL HEALTH

(Dr. Richard G. Tedeschi, Dr. Bret A. Moore, Dr. Taryn C. Greene)





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## A Preliminary Examination of a Posttraumatic Growth-Based Program for Veteran Mental Health

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Prevalence studies of combat veterans from the recent conflicts in Iraq and Afghanistan reveal that up to 20% experience some type of psychiatric disorder as a result of their combat experiences. One of the more notable psychiatric conditions for combat veterans is posttraumatic stress disorder (PTSD). Currently, trauma-focused, manualized psychotherapies are the prominent interventions for PTSD. These interventions, however, have significant limitations related to effectiveness, tolerance, and adherence. Consequently, alternative interventions should be considered. The present study provides longitudinal data over 18 months on an integrative approach that is based on the principles of posttraumatic growth. Outcomes related to psychiatric symptoms, quality of life, stress and emotion management, psychological flexibility, and psychological growth are reported. The application of these principles by practitioners is reviewed.

#### Clinical Impact Statement

Current treatments for PTSD in combat veterans have established efficacy, but a significant portion of those who receive these treatments either discontinue prematurely or experience modest gains. A novel approach to the treatment of trauma in combat veterans has been developed that integrates the interventional model of posttraumatic growth, which is the concept that positive and transformative psychological changes result in the struggle with difficult life experiences.

Keywords: posttraumatic growth, posttraumatic stress disorder, military trauma, evidence-based practice

Although estimates vary, prevalence studies of combat veterans from the recent conflicts in Iraq and Afghanistan reveal that up to 20% experience some type of psychiatric disorder as a result of their combat experiences (Hoge et al., 2006; Hoge et al., 2004; Tanielian & Jaycox,

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2008). Considering roughly three million men and women have deployed to these combat theaters since 2001, this translates to over one half million veterans who have likely experienced significant psychiatric effects associated with their combat experiences. One of the more notable psychiatric conditions for combat veterans is posttraumatic stress disorder (PTSD). PTSD has a relatively wide prevalence range within this population. Lifetime prevalence of PTSD for Vietnam era veterans is approximately 30% when broad criteria are used (Kulka et al., 1988) and approximately 19% when more formal, obiective criteria are applied (Dohrenwend et al., 2006). Reported PTSD rates for Iraq and Afghanistan veterans range between 8 and 25% (Hoge et al., 2007; Hoge & Warner, 2014; Institute of Medicine, 2014; Tanielian & Jaycox, 2008; Wisco et al., 2014) with another 8% who experience clinically significant PTSD symptoms but do not necessarily meet criteria for the disorder (Bergman et al., 2017). In the first study to assess rates of PTSD in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) veterans, Hoge and colleagues (2004) found that military service members deployed to Iraq and Afghanistan screened positive for PTSD at the rate of 17% and 11%, respectively. Using the post-deployment health assessment, a combination self-report instrument and interview focused on physical and psychological health following deployment, Hoge et al. (2006) reported that approximately 10% of OIF and 5% of OEF veterans screened positive for PTSD. There is also a high degree of comorbidity between PTSD and other psychiatric disorders such as anxiety and depression. In a large outpatient civilian sample of individuals diagnosed with PTSD, over 60% met criteria for generalized anxiety disorder, panic disorder, and/or obsessive-compulsive disorder, and over three fourths met criteria for a mood disorder (Meyer et al., 2019). In a sample of veterans, Orsillo and colleagues (1996) found that those veterans diagnosed with PTSD had a greater likelihood of being diagnosed with a mood or anxiety disorder compared to those without a diagnosis of PTSD. High rates of comorbidity between PTSD and substance use disorders have also been noted (Kruse et al., 2019). Prior research on Afghanistan and Iraq veterans revealed that up to 75% of those with a documented drug and/or alcohol problem also had a diagnosis of PTSD (Seal et al., 2011). In a study of approximately 13,000 military personnel who completed a combat tour to Iraq and screened positive for PTSD or depression, roughly half acknowledged problem drinking and/or aggressive behavior (a set of behaviors strongly correlated with alcohol and/or drug use; Thomas et al., 2010). Arguably the most troubling psychiatric issue facing our veterans today is the significant increase in suicide ideation, attempts, and completions over the past decade (Rudd et al., 2015). Between 2001 and 2011, the suicide rate in active duty military personnel doubled and surpassed the civilian rate (Defense Suicide Prevention Office, 2013) and remains elevated today for both active duty and veteran populations.

#### **Evidenced-Based Interventions for PTSD**

Considering the prevalence and burden of psychiatric conditions related to military service, substantial financial resources have been expended on studying evidenced-based interventions and training military and civilian mental health clinicians in those interventions. This is particularly true for PTSD. The most recent manifestation of this emphasis is the 2017 release of the Department of Veterans Affairs and Department of Defense (VA/DOD) Clinical Practice Guideline for the Management of Posttraumatic Stress Disorder and Acute Stress Disorder. An expert consensus work group reviewed the available literature on the most effective psychotherapeutic and pharmacological interventions for PTSD and offered recommendations to clinicians based on this review. Several psychotherapies were noted to have sufficient evidence supporting their use for veterans diagnosed with PTSD. Trauma-focused, manualized therapies (stepwise, scripted interventions that require the veteran to actively confront the trauma through writing or talking about the event or through imaginal or in vivo exposure) were deemed to have the highest level of research support and the strongest recommendation for use. Prolonged exposure therapy (Foa & Kozak, 1986), cognitive processing therapy (Resick & Schnicke, 1992), and eyemovement desensitization and reprocessing (EMDR; Shapiro, 1989) are representative of this category. Nontrauma, manualized therapies (e.g., stress inoculation training, presentcentered therapy) were afforded a second-tier recommendation (to be used if trauma-focused therapy is not available or tolerated by the patient). These interventions are beneficial for many veterans diagnosed with PTSD who seek treatment (see Moore & Penk, 2019 for a review of PTSD interventions with military personnel and veterans) and the research supporting their efficacy is well-established (Watkins et al., 2018). However, depending on which study is cited, up to two-thirds of individuals who receive treatment may retain the PTSD diagnosis. Early termination or "dropout" of treatment is another problem, which can be as much as 40% (Kehle-Forbes et al., 2016; Schnurr et al., 2007; Steenkamp et al., 2015). There is also the issue of efficacy. Trauma-focused therapies tend to be about as equally effective as other psychotherapies, meaning that there may be little value in using a trauma-focused therapy over others (Steenkamp et al., 2015). This calls into question the notion of recommending trauma-focused psychotherapies as a first-line intervention, considering the high potential for treatment dropout.

If a trauma-focused psychotherapy is not available, or if the service member or veteran is not interested in or cannot tolerate a traumafocused psychotherapy, the VA/DoD guidelines recommend the use of four specific medications: three selective serotonin reuptake inhibitors (paroxetine, sertraline, and fluoxetine) and one serotonin norepinephrine reuptake inhibitor (venlafaxine). Indeed, other medications from multiple medication classes (e.g., antipsychotics, antiepileptics, antihypertensives) are used with veterans diagnosed with PTSD, even though the research supporting their efficacy is lacking and/or their risks outweigh their benefits (Charney et al., 2018). Moreover, a substantial number of veterans may not like using medication to manage their symptoms, and for those who see medication as a viable option, the side effects or lack of efficacy may lead to early discontinuation (Sauvé & Stahl, 2019; Tedeschi & Moore, 2018).

#### A Novel, Posttraumatic Growth-Based Approach

Considering the limitations of prominent psychotherapeutic and pharmacological treatments and the preferences of service members and veterans, it is reasonable to consider more "nontraditional" interventions for PTSD and related conditions (Elkins et al., 2019). Specifically, wellness and growth-oriented interventions may offer benefit in-lieu of or combined with standard practices (Tedeschi et al., 2018). Progressive and Alternative Training for Healing Heroes (Warrior PATHH) is one such program.

Warrior PATHH is the flagship program of Boulder Crest Foundation (BCF), a community-based, nonprofit, multisite organization that is focused on the psychological health of veterans and first responders. Warrior PATHH draws upon evidence-based psychological principles and utilizes complementary and alternative interventions for the mitigation of posttraumatic stress and related conditions as well as improvement in quality of life. The program is based on

the theory of posttraumatic growth (PTG), which posits that positive psychological changes can occur in the aftermath of difficult life experiences, specifically in the areas of personal strength, relating to others, new possibilities, appreciation of life, and spiritual/ existential matters (Tedeschi et al., 2018). Warrior PATHH is also based on the intervention model of PTG as described by Tedeschi and colleagues (Calhoun & Tedeschi, 2013; Tedeschi & McNally, 2011; Tedeschi & Moore, 2016, 2018). This model includes a relational approach to intervention called Expert Companionship. This approach emphasizes that those providing the intervention, in this case peer "Guides," focus on learning from each individual about their trauma and life experiences, and deemphasize presenting themselves as experts on the experiences of the participants. This is a humble and empathic way of relating that creates a sense of psychological safety. Expert Companions facilitate progress through five content elements that follow the PTG process model derived from research: (a) psychoeducation about physiological and psychological trauma response and psychological growth; (b) emotion regulation training, including meditative and mindfulness techniques; (c) constructive self-disclosure about trauma and life in the aftermath of trauma that occurs naturally through casual discourse, unlike deliberate and directed exposure seen in commonly used psychotherapies for PTSD like prolonged exposure; (c) narrative development that integrates perspectives on the past, present, and future, which is distinguished from standard trauma therapies that focus much of the attention on the trauma itself; and (d) "missions" that are developed to transmit the learning about the value of life, living courageously, and other understandings to those in society who have not been exposed to these perspectives.

The Warrior PATHH intervention is delivered as a peer-to-peer training program during a weeklong stay at one of the Boulder Crest facilities, then 18 months of follow-up through a web-based series of meetings and assignments. The 48 modules of the residential portion of the program are described in a 200-page instructors guide developed for internal use by Boulder Crest, and the follow-up to the retreat is laid out for online use by instructors and participants. The peers who deliver the bulk of the program

are combat veterans who have undergone several months of training from peer leaders with years of experience delivering the program as well as licensed mental health professionals. Peers receive ongoing training and consultation from these same peer leaders and professionals. A more complete description of the Warrior PATHH program can be found in Tedeschi and Moore (2018).

Warrior PATHH is considered a training program as opposed to a treatment program. Although the program does not offer evidencedbased psychotherapies, some of the literature on interventions supported by multiple randomized controlled trials (RCT; e.g., behavioral, cognitive, mindfulness-based therapies) and those with growing research support (e.g., equine therapy, exercise, adventure therapy, meditation, yoga) can be applied to understanding how and why Warrior PATHH works. In the following pages, results from an 18-month longitudinal pilot study assessing the effectiveness of Warrior PATHH with combat veterans are provided along with additional description of how Warrior PATHH works and has application to standard psychotherapy.

#### Method

#### **Participants and Procedure**

Participants were 49 United States combat veterans who were referred to the Warrior PATHH program in Bluemont, Virginia between August, 2016 and May, 2017. The participants were self-referred, often based on learning about the center from other veterans who were familiar with the organization and program. The only exclusionary criteria for Warrior PATHH are disorders that might require hospitalization, such as psychosis, substance abuse, or active suicidality. Most veterans were male (n = 37), ranging in age from 20 to 59 (M = 39, SD = 6.8). Twenty-three (47%) veterans were married, 16 (33%) were single, and 10 (20%) were either separated or divorced. All veterans served during the Operation Enduring Freedom and/or the Operation Iraqi Freedom era. Twenty-three (47%) veterans served in the Army, 19 (39%) served in the Marine Corps, five (10%) served in the Navy, and two (4%) served in the Air Force. The modal number of combat deployments was two (M = 2.4).

Over the course of 18 months, participants were evaluated at multiple time points: prior to start of Warrior PATHH, immediately following the 7-day program, and at the 30-day, 90day, 180-day, 1-year, and 18-month marks. At the initial time point, all 56 participants entering the program provided data; at the 18 month completion point, all 56 participants completed the program but only 49 provided complete data, for an 87.5% response rate. In this report, data from the first time point, prior to the start of the program, and the final time point, upon completion of the program, are reported for the 49 participants for whom there are complete data. The formal evaluation comprised approximately 250 questions across 24 measurement tools and was administered via Survey Monkey. A selection of the most important and wellvalidated measures is reported here. Institutional Review Board approval was obtained for this pilot study.

#### Measures

The original study consisted of 24 existing and novel measures, which focused on psychiatric symptoms, quality of life, stress and emotion management, psychological flexibility, and psychological growth. Broadly, the study instruments can be categorized into "Symptomology" and "Positive Attributes". The measures of primary interest reviewed in this report are listed below.

#### PTSD

The PTSD Checklist (PCL-5; Weathers et al., 2013) is a 20-item self-report instrument that aligns with the diagnostic criteria for PTSD in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013). Respondents rate each question on a 5 point frequency scale ranging from not at all to extremely. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 0-4. Prior research has revealed strong construct validity and test-retest reliability in veteran samples (Bovin et al., 2015; Dutra et al., 2019). A provisional diagnosis of PTSD can be made based on a total score of 33 (Bovin et al., 2016).

#### Depression, Anxiety, Stress

The Depression Anxiety and Stress Scales (DASS-21; Antony et al., 1998) is a 21-item self-report measure that assesses the presence and degree of depression, anxiety, and stress related symptoms. Respondents rate each question on a 4 point frequency scale ranging from *never* to *almost always*. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 0–3. The DASS has shown adequate test-retest reliability and discriminate and convergent validity in clinical samples (Brown et al., 1997). The instrument provides a subscale score for each clinical axis.

#### Insomnia

The Insomnia Severity Index (ISI; Bastien et al., 2001) is a 7-item self-report measure that assesses insomnia and is based on *DSM-IV* and the International Classification of Sleep Disorders criteria. This instrument assesses severity and impact of insomnia over the past two weeks. Respondents rate each question on a 5 point Likert scale ranging from *none* to *very severe*. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 0–4. The ISI has shown to be a highly reliable and valid measure for detecting insomnia and assessing response to treatment (Morin et al., 2011).

#### Positive and Negative Symptoms

The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) is a 20-item self-report measure that includes words associated with both positive and negative affect. A positive and negative affect score can be obtained based on the extent a respondent identifies with each word over a specified time period (often a week). Respondents rate each question on a 5 point Likert scale ranging from not at all to extremely. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 1–5. It has been reported that the PANAS has strong reliability and construct validity and substantial available normative data (Crawford & Henry, 2004).

#### Stress Reactivity

The Perceived Stress Reactivity Scale (PSRS; Schlotz et al., 2011) is a 23-item measure that assesses a person's response intensity across a variety of stressful situations typically encountered in day-to-day life. The PSRS includes five subscales: prolonged reactivity, reactivity to work overload, reactivity to social conflicts, reactivity to failure, and reactivity to social evaluation. Respondents rate each question on a 3 point Likert scale. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 0–2. Prior research has revealed strong construct validity and reliability internationally (Schlotz et al., 2011).

#### Posttraumatic Growth

The Posttraumatic Growth Inventory-Expanded (PTGI-X; Tedeschi et al., 2017) is a 25-item scale that measures the extent to which individuals report positive psychological change as a result of experiencing a traumatic event. The degree to which individuals experience change is assessed in five domains: new possibilities ("I established a new path for my life"), personal strength ("I discovered that I'm stronger than I thought I was"), relating to others ("A sense of closeness with others"), spiritual-existential change ("A better understanding of spiritual matters"), and appreciation of life ("I can better appreciate each day"). The PTGI-X is based on the original 21-item PTGI (Tedeschi & Calhoun, 1996) except that it adds items representing existential change. Respondents rate each question on a 6 point Likert scale ranging from I did not experience this change to I experienced this change to a very great degree. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 0-5. Research on the expanded version of the PTGI reveals good internal consistency and construct validity (Tedeschi et al., 2017).

#### Psychological Flexibility

The Acceptance and Action Questionnaire II (AAQ-II; Bond et al., 2011) is a 7-item self-report measure designed to evaluate a person's inability to adapt to changing life demands, ability to shift perspective, and general psychological flexibility. Respondents rate each ques-

tion on a 7 point Likert scale ranging from *always true* to *never true*. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 1–7. Research employing multiple samples revealed satisfactory structure, reliability, and validity of the instrument (Bond et al., 2011).

#### Ego Resiliency

The Ego Resiliency Scale (ER89; Block & Kremen, 1996) is a 14-item self-report measure of the ability to adapt level of control to situational context, or what is often referred to as adaptive flexibility, and has shown adequate internal consistency and validity across multiple diverse samples (Alessandri et al., 2012). People who are ego-resilient experience more positive affect, self-confidence and psychological adjustment. Respondents rate each question on a 4 point Likert scale, ranging from *does not apply at all* to *applies very strongly*. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 1–4.

#### Integration of Stressful Experiences

The Integration of Stressful Life Experiences (ISLES; Holland et al., 2010) is a 16-item measure designed to assess the extent to which someone has made sense of a problematic life experience. Two subscales can be computed: footing in the world and comprehensibility. Respondents rate each question on a 5 point Likert scale, ranging from *strongly agree* to *strongly disagree*. Scale scores were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 1–5. The ISLES has been shown to have strong internal consistency, moderate test-rest reliability, and strong convergent validity (Holland et al., 2010).

#### Self-Compassion

The Self-Compassion Scale-Short Form (SCS-SF; Raes et al., 2011) is a 12-item measure of six aspects of compassion toward self: self-kindness, self-judgment, common humanity, isolation, mindfulness, and overidentification with failure. Respondents rate each question on a 5 point Likert scale, ranging from almost never to almost always. Scale scores

were computed as mean scores to retain the meaning of item-level frequency metric. The observed metric is 1–5. As noted by Coroiu and colleagues (2018), the SCS maintains adequate structure and validity across multiple populations.

#### Results

#### **Descriptive Statistics**

Descriptive statistics are displayed in Table 1. Descriptive statistics indicate that all means were within a reasonable range (i.e. no obvious floor or ceiling effects) and standard deviations indicated acceptable variability in responses, given the metric for each variable.

At time one (before starting the Warrior PATHH program), the sample reported moderate levels of symptoms of PTSD and negative affect. The sample also reported, to a lesser extent, feelings of stress, stress reactivity, symptoms of depression, and symptoms of insomnia. The magnitude of symptoms reported is consistent with what we would expect given the nature of Warrior PATHH as a peer-to-peer training program (vs. an inpatient or outpatient hospital setting).

At time one the sample also reported moderate levels of ego resiliency and some experiences of positive emotions. The sample reported moderate amounts of integration of stressful life experiences, and a small degree of posttraumatic growth. Participants expressing these positive attributes underlies the fact that this is not a severely disordered clinical population, and thus the population was appropriate to undergo a Warrior PATHH intervention.

#### **Changes in Scores Pre and Post Intervention**

Sample means at time one were compared with sample means at time two (at the 18 month program completion point). Changes in means for all variables are displayed in Table 1.

#### Reductions in Symptomology

At time two the sample demonstrated, on average, large reductions in all six symptom areas noted at intake. The largest reductions were seen in PTSD, insomnia, and negative affect. The sample reported a shift from mod-

**Table 1**Descriptive Statistics and Changes in Means

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Variables	Mean	SD	Mean	SD	Mean change
Symptomology					
PTSD	1.94	.83	.89	.79	$-1.05^{b}$
Depression	1.06	.76	.52	.61	$54^{b}$
Anxiety	.77	.67	.46	.56	$31^{b}$
Stress	1.32	.63	.85	.65	$47^{b}$
Stress reactivity	1.07	.38	.71	.37	$36^{b}$
Insomnia	2.00	.81	1.20	.88	$80^{b}$
Negative affect	2.49	.91	1.85	.68	$64^{b}$
Positive Attributes					
Posttraumatic growth	2.08	1.14	3.24	1.30	1.16 <sup>b</sup>
Positive affect	2.64	.75	3.27	1.04	.63 <sup>b</sup>
Ego resilience	2.79	.52	3.17	.52	.38 <sup>b</sup>
Integration	2.91	.73	3.58	.87	.67 <sup>b</sup>
Self-compassion	2.74	.52	3.35	.64	.61 <sup>b</sup>
Psych flexibility	4.06	1.36	5.35	1.30	1.29 <sup>b</sup>

*Note.* n=49. Stress reactivity scale 0–2; Depression, anxiety, stress scales 0–3; PTSD, insomnia scales 0–4; PTG scale 0–5; Ego resilience scale 1–4; Negative affect, positive affect, integration, and self-compassion scales 1–5; Psych flex scale 1–7.  $^{\rm a} p < .01$ .  $^{\rm b} p < .001$ .

erate to few PTSD symptoms, as well as a shift from moderate to mild insomnia. The sample shifted from moderate to very slight negative affect, indicating that at completion of PATHH participants were less likely to report feeling distressed, guilty, or ashamed, for example. The sample moved from "sometimes" feeling depressed to "almost never" feeling depressed. Sample means also indicated a change from "usually" feeling reactive to stress to "almost never" feeling reactive to stress.

#### Increases in Positive Attributes

At time two, large increases were seen in PTG and psychological flexibility. The sample shifted from experiencing a small amount of PTG to experiencing moderate amounts of this positive psychological phenomenon. Participants also reported a large improvement in psychological flexibility, shifting from only sometimes experiencing it to very often experiencing it. This indicates that at completion of PATHH, participants felt more able to face emotions and experienced less worry about painful memories and negative emotions. Integration of stressful life experiences increased at time two, manifesting as increased understanding of beliefs around stressful experiences as well as more feelings of

being on track in life. The sample also reported increases to a moderate amount of positive affect, indicating participants felt stronger, more enthusiastic, and more inspired upon completion of PATHH. Lastly, participants reported increases in self-compassion from seldom experiencing it to sometimes or frequently experiencing self-compassion.

#### **Zero-Order Correlations**

Given that Warrior PATHH is based on the PTG concept and that the program attempts to facilitate PTG, it is important to test the relationship between PTG and various outcomes of the PATHH program. Strong relationships between PTG and other outcome measures, especially at time two, would suggest that facilitating PTG may work to enhance other outcomes as well.

Pearson product-moment correlations were used to explore associations between posttraumatic growth and the outcome variables at time one (See Table 2). This initial cross-sectional look at the data confirms prior findings regarding PTG and its nomological network (Tedeschi et al., 2018). Taken as a whole, the pattern of correlations between PTG and the other mea-

**Table 2** *Zero-Order Correlations Between Posttraumatic Growth and Study Variables Over Time* 

	Posttraumatic growth			
Variables	T1	T2	Change in r	
PTSD	19	59 <sup>b</sup>	40 <sup>a</sup>	
Anxiety	16	$52^{b}$	$36^{a}$	
Depression	26	51 <sup>b</sup>	25	
Stress	35	$58^{b}$	23	
Insomnia	21	$39^{a}$	18	
Negative affect	$38^{a}$	$53^{b}$	15	
Stress reactivity	$44^{b}$	51 <sup>b</sup>	07	
Psych flexibility	.27	.57 <sup>b</sup>	.30	
Integration	.36	.51 <sup>b</sup>	.15	
Positive affect	.31	.43 <sup>b</sup>	.12	
Self-compassion	.35	.46 <sup>b</sup>	.11	
Ego resilience	.60 <sup>b</sup>	.63 <sup>b</sup>	.03	

*Note.* n = 49. T1 = time one; T2 = time two. r = Pearson product moment correlation.

sures confirms that, at time one (before PATTH involvement), variance in PTG was negatively associated with measures of symptomology (e.g., mental health disorders, stress reactivity, negative affect) and positively associated with coping or resiliency type attributes (e.g., ego resilience, integration). Although traditional NHST statistical significance levels were not always achieved given the low power, it is worth noting that all effect sizes were moderate to large in magnitude with the exception of PTSD and anxiety.

Pearson product-moment correlations were used to explore correlations between posttraumatic growth and the outcome variables 18 months later, at time two (See Table 2). This set of cross-sectional correlations assesses the magnitude of associations between variance in PTG and the outcomes after participants were involved with PATHH. The observed pattern of correlations between PTG and the other measures confirms that, at time two, negative associations between variance in PTG and variance in all measures of symptomology (e.g., mental health disorders, stress reactivity, negative affect) were strengthened. This was particularly true for associations between PTG and PTSD, and PTG and anxiety, where we observed negative associations increase from small and insignificant to large and significant effect sizes. Additionally, negative associations between

PTG and depression, as well as PTG and insomnia were strengthened, shifting from medium to large effect sizes.

The observed pattern of correlations between PTG and the other measures at time two also confirms that, at completion of PATTH, positive associations between variance in PTG and variance in all measures positively associated with coping or resiliency attributes were strengthened. This was particularly true for associations between PTG and psychological flexibility, PTG and integration of stressful experiences, PTG and positive affect, and PTG and self-compassion; we observed positive associations increase from medium to large effect sizes across these variables. Additionally, the positive association between PTG and ego resilience held at completion of PATHH. The change in strength of correlations between PTG and other study variables is shown in Table 2.

#### Discussion

As noted above, strictly speaking, the Warrior PATHH program is not a psychotherapeutic intervention. It was developed as a training program for the purpose of integrating veterans into their communities in the aftermath of combat. Many veterans require training to learn how to translate their valuable skills learned in military service and to regain the capacity to regulate their thoughts, feelings, and actions in a civilian environment. In doing so, they become more capable of serving their communities as sources of enrichment in the lives of others. The program helps to facilitate PTG in its five domains: recognizing personal strength, improved interpersonal relationships, finding new possibilities in life, greater appreciation for life, and spiritual and existential development. The program is also described as a training program because this term resonates with military service members, who can adopt an openness to training more readily than for psychotherapy, which is facilitated by trained mental health professionals rather than peers. The activities in the program mix classroom instruction, discussion, and experiential activities that help participants to see how the principles of the program work in practice.

This program appears to be very different from office-based individual psychotherapy. It is an intensive, residential program that is a

 $<sup>^{</sup>a} p < .01.$   $^{b} p < .001.$ 

training intervention rather than therapy, it has a long-term online follow-up, it is delivered by culturally competent peers, and it uses alternative intervention modalities, some of which require settings and resources unavailable to most therapists. However, since it has a number of elements of empirically based treatments for PTSD incorporated into the design of the program, it can serve as a basis for effective trauma therapy for various populations. In fact, the Warrior PATHH program was derived from a PTG-based therapy (Calhoun & Tedeschi, 1999, 2013) and in other ways it has been used to treat combat trauma (Tedeschi & McNally, 2011; Tedeschi & Moore, 2016).

Psychotherapists who are familiar with standard empirically based trauma treatment will recognize how this PTG-based approach utilizes many aspects of those therapies. There are clear cognitive, narrative, and existential elements of this therapy that are integrated within a relational approach to intervention termed *Expert Companionship* (Tedeschi et al., 2018). Elements of empirically based treatments for PTSD are found in this process, which makes this model of intervention very accessible to practitioners who do not have the resources used in the Warrior PATHH program.

The therapy relationship emphasizes cultural competence, skilled listening, and empathy, a therapeutic stance that has an empirical basis. This is enacted in five phases of process that are based on studies of how PTG develops and that integrate various trauma treatment concepts and strategies. The phases of the Warrior PATHH intervention that also form the basis for individual trauma therapy with a PTG approach have similarities and differences from standard trauma treatments such as prolonged exposure and cognitive processing therapy. A key difference is that all these elements of the therapy are denoted within Expert Companionship, meaning that therapists present themselves as learners and listeners to understand the individual person's trauma experience and its aftermath, rather than operating as technicians with therapeutic interventions to be delivered. As in other trauma therapies, an important initial element is psychoeducation about trauma response, but in a way that emphasizes the PTG perspective on core belief disruption as well as the physiological aspects of trauma response. Although expertise about these aspects of trauma are offered, the expert companion collaborates closely to weave the individual's experience into the explanations of the effects of trauma. Emotional regulation practices are an integral part of the approach that allows the participant to better tolerate internal and external reminders of trauma as well as interpersonal conflict. Here the Expert Companion works with the individual to determine which kinds of emotional regulation strategies are most accessible and effective for the person, and therefore a variety of approaches can be discussed and tailored to the individual. Exposure through disclosure of memories or situations that trigger PTSD symptoms associated with avoidance and arousal is part of this approach as it also is in other trauma treatments. In this PTG-based approach, there is more of an emphasis on disclosure about life in the aftermath of trauma rather than a focus on the trauma itself. Seldom would there be a repetition of trauma experiences as found in prolonged exposure. In fact, in Warrior PATHH, veterans talk relatively little about combat trauma, but rather the emphasis is placed on a future orientation that moves people toward new meaning and purpose. Exposure occurs naturally during the various program exercises and is not directed or guided by the exercise leaders. It is not unlike exposure that occurs in the discourse between a trauma survivor and someone within his or her social support system. Narrative development is encouraged through cognitive processing in order to develop a clearer sense of the events, and how they fit into the developing life story of the trauma survivor. Activities that encourage participants to consider or to reconsider their beliefs about their past, present, and future offer the possibility of PTG by creating a narrative that is a coherent story of the trauma, its context, and how it leads into a future that has a purpose. The orientation here is more future oriented than in other trauma treatments, and this narrative approach is a major portion of the work. The Expert Companion helps the individual see possibilities and highlights often the emerging areas of posttraumatic growth that begin to be evident in most trauma survivors even in the early aftermath of trauma. The process of bringing these areas of growth into focus is often subtle, as it is important to attribute the changes to the hard work of the individual in the aftermath of trauma rather than to the trauma

itself. The final element of the process is the development of a pathway toward service to others. This is a capstone to the narrative where the trauma has been transformed into service in the family, community, or nation with an emphasis on wise and close connections with others who then benefit from the experiences of the trauma survivor. In this way, PTG becomes a way of life that may benefit many people, mitigates the distress of loss and PTSD symptoms that may continue at some level, and represents a sustaining sense of identity and an organization of activities and relationships. This transformation is encouraged by the Expert Companion who points out to the trauma survivor that the posttraumatic growth that has become evident equips them to effectively play important roles in ways they may not have considered previously. The narrative of the trauma experience becomes much more than a reduction of symptoms or mere survival when missions of service are defined and embarked upon.

#### **Limitations and Future Work**

The results of this first attempt to quantitatively evaluate the Warrior PATHH program are promising but indicate that much more work lies ahead in developing effective and efficient interventions for military service members who are struggling with symptoms of PTSD and related problems. Although the response rate for this study was very high, it is useful to be able to gather data from a larger number of participants. How much the apparent success of the program is dependent on specific elements is not clear with this report of change over time. In order to determine what aspects of the program are primarily responsible for the gains reported would require a dismantling strategy, where certain parts of the program were provided only to a subset of participants. If it is to be generally and widely useful, the Warrior PATHH approach as implemented at Boulder Crest would need to be portable and translated to other settings. There are aspects of this program that make this difficult, primarily the use of outdoor activities that require a physical plant that can support them. However, a number of important aspects of the program can be replicated in many settings: The PTG approach can be learned, and much of the program content can also be translated for other settings.

This pilot program evaluation does not provide a comparison group as Boulder Crest exists primarily to provide services to veterans and first responders and not as a vehicle for research. Therefore, it is not possible with this study to assert that the particular outcomes result from participation in the program. However, changes over several measures that remain stable over a long period of time do suggest that the participants are experiencing a level of successful living that is significantly different from previous functioning, that these changes occurred during the first week in the program, and they continued at least during the 18-month period of further support. If changes such as these typically occurred with veterans spontaneously, we would not be seeing the frequent reports of struggle and disability in this population. It is difficult to logically account for the changes measured here except as effects of the participation in the program.

There are likely to be some common factors at work in producing the gains reported above. The program is free to participants, and the recommendations by other veterans likely set in motion a high degree of trust in the program and its staff, and expectations for success that lead to investment by the participants. The fact that the program is provided by staff who are veterans themselves is also likely to enhance trust as there is strong cultural competency here. The group approach may also enhance peer support and sense of safety. Optimizing common factors that are primarily relationship-based is a strength of this PTG-based approach to PTSD and related problems and likely has a great impact on outcomes (Norcross & Wampold, 2019). The data reported here also suggest that the PTG basis for the program enhances outcomes on variables that are symptom-based as well as those indicative of resilience and overall effectiveness in living.

As mentioned above, there are many ways the Warrior PATHH program is offered at Boulder Crest that are not replicable in most other settings. The question then becomes whether the specific ways the program is offered, in a tranquil natural setting, with many opportunities for outdoor experiences, with a group setting and peer trainers, and in a condensed residential setting, are responsible for much of the effects, or whether the effects can be replicated to an extent in a traditional private office setting. We

believe that replicating the positive outcomes from Warrior PATHH is possible, and we have experience in doing this in our work with many individual clients. The five elements of the program previously described can all be offered in a traditional therapy, as noted in a case presented by Tedeschi (2011), and in a workbook that can be used as an adjunct to therapy or as a self-help guide (Tedeschi & Moore, 2016). Familiarity with the culture of the client (e.g., military culture), a relational approach described as Expert Companionship, and encouraging the client to engage in some of the kinds of activities included in the program can all produce effects that mirror those found in the Warrior PATHH program. We see PTG as a process that people naturally aspire to if given opportunity and guidance. At the same time, we also see that many of the people who come to Warrior PATHH respond more rapidly and robustly to the structure and experiences offered in the program, and likely have superior outcomes compared with individual therapies, even those that have a strong PTG component.

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# **BOULDER CREST FOUNDATION SCIENTIFIC ADVISORY PANEL**

The development and evolution of all aspects of Warrior PATHH is supported by the Boulder Crest Foundation Scientific Advisory Panel. The Panel includes luminaries from across the field of psychology.



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# WHAT'S NEXT

2023 marks the tenth year of Warrior PATHH programming, and the program continues to prove itself far more effective than current approaches to PTSD, anxiety, depression, and suicidality. It is also clear — and a key element of the culture of Boulder Crest and all of our Warrior PATHH partners — that we can always do better to ensure that our nation's Warriors can thrive, and transform deep struggle into profound strength and lifelong growth. To that end, we have identified seven actions in 2023:

# IMPLEMENT 5.5 EDITION OF WARRIOR PATHH CURRICULUM

Based on the tremendous success of the implementation of the 5.0 edition of the Warrior PATHH curriculum, we made modest changes to enhance the curriculum for 2023, in the form of the edition 5.5.

# DEVELOP COMPREHENSIVE PRE-PATHH TRAINING PROGRAM

On average, there are 130 days between when a student applies for Warrior PATHH and they arrive at the Initiation. We are developing a comprehensive approach — focused on connection, preparation, and perspective — to maximize students' ability to benefit from Warrior PATHH. This effort will leverage the perspectives of all the Warrior PATHH teams, the Boulder Crest Institute (led by Dr. Richard Tedeschi, Dr. Bret Moore, and Dr. Taryn Greene), and students.





## **ENHANCE myPATHH CONTENT**

The rollout of the new myPATHH app as part of the 5.0 curriculum has been an incredible success. Levels of engagement in both community and learning features has been substantially improved from the prior iteration of myPATHH. We plan to continue building on this success to develop new content and features which will be rolled out throughout the year.

### **CONTINUE RESEARCH COLLABORATION WITH BAYLOR**

In 2022, Boulder Crest began collaborating with Dr. Gary Elkins of Baylor University, to provide anonymized data from Warrior PATHH participants for study and investigation. This work will continue in 2023.

### **BUILD OUT THE PATHH PARTNER NETWORK**

Warrior PATHH continues to experience substantial growth in the number of applications, the result of students spreading the word about their transformative experiences. To keep pace with growing demand, four teams have been added for 2023: Eagle Oak Retreat Foundation, located in Italy,TX; a second Boulder Crest Foundation Mobile Training Team; and second teams at Big Red Barn Retreat and Sheep Dog Impact Assistance. This expansion is made possible by support from the Avalon Action Alliance. As a result, we anticipate growing the number of Warrior PATHH programs from 105 in 2022 to 133 in 2023, and the number of participants from 747 in 2022 to 950 in 2023.





## IMPLEMENT STAFF SERGEANT FOX SUICIDE PREVENTION GRANT FROM VA

In 2022, the Department of Veterans Affairs established the Staff Sergeant Fox Suicide Prevention Grant Program, focused on providing resources for community-based suicide prevention efforts. Two Warrior PATHH delivery organizations — Boulder Crest Foundation and Permission to Start Dreaming Foundation — received grants through this program and are implementing the grant in partnership with the VA. We are hopeful that both organizations will continue to be recipients of VA funding through each of the three years of the program, and that this becomes a permanent VA program that could support Warrior PATHH across the country.

## PATHH GUIDE ACADEMY

The Train-the-Trainer program developed to support the expansion of Warrior PATHH has proved incredibly successful. This is evidenced by the fact that reductions in PTSD, depression, anxiety and stress have only grown larger with expansion (from 54% in 2018 to 58% in 2022) and Posttraumatic Growth improvements have remained substantial and consistent (56% in 2018 and 2022). However, we believe in continuous improvement; with that in mind, we are launching the PATHH Guide Academy, a comprehensive training system to support all Warrior PATHH delivery locations. The Academy was a collaborative effort that involved engagement from all nine Warrior PATHH teams.



Besides becoming a husband and father, Warrior PATHH was the most impactful, positive event in my life.

Warrior PATHH was not treatment. It was not medical or clinical. It was training. All the facilitators were current or former service members and/or first responders and Warrior PATHH alumnus. The two former Marines who led my class were the real deal. Tales of guts and glory, violence and death, sorrow and sadness didn't impress or scare them. My battle-hardened ego couldn't dismiss them as academics who learned war from movies. They'd been there and done that — yet they'd both found the bridge and now were leading others across. They got it, they got us, they were us. We were safe to be vulnerable and grow together.

Warrior PATHH was no panacea. It was an opportunity that many needed and deserved. It was people like us, helping people like us, because they were once us. Warrior PATHH taught me that my past only defined my future if I wrote the story that way — I held the pen. The trauma of war was not the author of my life.

Warrior PATHH taught me the power of the pen.



# "THERE IS NOTHING NOBLE IN BEING SUPERIOR TO YOUR FELLOW MAN; TRUE NOBILITY IS BEING SUPERIOR TO YOUR FORMER SELF." — ERNEST HEMINGWAY

Warrior PATHH is the nation's first-ever program designed to cultivate and facilitate Posttraumatic Growth (PTG) in combat veterans and first responders, and train these remarkable men and women to transform times of deep struggle into profound strength and lifelong growth. Over the course of 3 months, beginning with 7 days of immersive and intensive training, students are able to make peace with their past, learn to live in the present, and begin planning for a great future – full of passion, purpose, and service – here at home.

"Warrior PATHH proceeds through the intervention steps described by Tedeschi and McNally (2011), and Calhoun and Tedeschi (2013), to facilitate Posttraumatic Growth. These steps derive from the model of the Posttraumatic Growth process that is well-validated in research studies of military service members and other trauma survivors."

 Dr. Richard Tedeschi, Psychologist and Father of Posttraumatic Growth

"Words cannot describe the effect and internal shift inside. I am, for the first time in my life, not at war within. The peace and calm feeling is foreign to me entirely, but wonderful. Here, you have discovered how to give a person their soul back."

- Warrior PATHH Graduate

