Posttraumatic Growth
Recent Developments in the Science and Application

Richard Tedeschi, Ph.D.
Professor emeritus, Health Psychology Doctoral Program, UNC Charlotte
Distinguished Chair, Boulder Crest Institute for Posttraumatic Growth
This presentation

• Conceptual review
• Application to a new PTG Based program for combat veterans
• Some initial data on outcomes
What is trauma?

How do people describe growth?

• [Trauma forces a person] "to be somebody else, the next viable you-a stripped-down whole other clear-eyed person, realistic as a sawed-off shotgun and thankful for air, not to speak of the human kindness you'll meet if you get normal luck."

“This is the one thing that happened in my life that I needed to have happen, it was probably the best thing that ever happened to me. On the outside looking in that pretty hard to swallow, I’m sure, but hey, that’s the way I view it. If I hadn’t experienced this and lived through it, I likely wouldn't be here today because of my lifestyle previously--I was on a real self-destructive path. If I had it to do all over again I would want it to happen the same way. I would not want it not to happen.”

DSM-5 description

- DSM-5 describes traumatic stress involved in PTSD as exposure to actual or threatened death or serious injury, or sexual violence
  - directly
  - or witnessing in person
  - or learning about violent or accidental event experienced by a family member or other close friend
  - Repeated exposure or extreme exposure to aversive details of events
Trauma--redefined

• Threat to *physical* integrity--perception of life threat
Trauma--redefined

• Threat to *physical* integrity--perception of life threat

• Threat to *psychological* integrity
  • if it represented a severe challenge to individuals’ past ways of understanding the world and their place in it.
Trauma--redefined

• Threat to *physical* integrity--perception of life threat

• Threat to *psychological* integrity
  • if it represented a severe challenge to individuals’ past ways of understanding the world and their place in it.

• A *moral injury*
  • acting in ways that seem counter to previously held moral codes, core beliefs.
Trauma & Core Beliefs

• Trauma is a *seismic event* for the belief system, the core beliefs that make up the *assumptive world*.
  • Challenging or shattering the *assumptive world*: Core beliefs about
    • How benevolent people are
    • How predictable events are
    • How controllable the world is
    • How vulnerable I am
    • How capable I am
    • Who I am, what kind of person am I
Trauma & narrative

• A turning point in the life narrative, the watershed event, changing perspectives, assumptive world.

• If events divide life into “before and after” they may be traumatic, and also, growth-enhancing.
Posttraumatic Growth (PTG)

Posttraumatic Growth is both a process and an outcome: The experience of positive changes in oneself as a result of the struggle with traumatic events.
Posttraumatic Growth is both a process and an outcome: The experience of positive changes in oneself as a result of the struggle with traumatic events.

New Possibilities
Posttraumatic Growth is both a process and an outcome: The experience of positive changes in oneself as a result of the struggle with traumatic events.

New Possibilities
Relating to Others
Posttraumatic Growth is both a process and an outcome: The experience of positive changes in oneself as a result of the struggle with traumatic events.

New Possibilities
Relating to Others
Personal Strength
Posttraumatic Growth is both a process and an outcome: The experience of positive changes in oneself as a result of the struggle with traumatic events.

- New Possibilities
- Relating to Others
- Personal Strength
- Appreciation of Life
Posttraumatic Growth is both a process and an outcome: The experience of positive changes in oneself as a result of the struggle with traumatic events.

- New Possibilities
- Relating to Others
- Personal Strength
- Appreciation of Life
- Spiritual and Existential Change
Existential Psychology and Suffering

• See Rollo May, Erich Fromm, Victor Frankl:
  • The human condition or facts of existence:
    • Suffering, guilt, and transitoriness.
  • By engaging these, we have the opportunity to develop meaning in our living.
  • Suffering doesn’t have to be *mere* suffering.
  • It can produce individuation (not necessarily happiness).
“I am a more sensitive person, a more effective pastor, a more sympathetic counselor because of Aaron’s life and death than I would ever have been without it. And I would give up all those gains in a second if I could have my son back. If I could choose, I would forego all of the spiritual growth and depth which has come my way because of our experiences, and be what I was fifteen years ago, an average rabbi, an indifferent counselor, helping some people and unable to help others, and the father of a bright, happy boy. But I cannot choose.”

A Model of PTG

• Describes the *process* of posttraumatic growth, incorporating person variables, and environmental influences.

• Primary vehicle is *cognitive processing of challenged core beliefs*.
Model of the PTG Process

- Person Pre-Trauma
  - Assumptive core beliefs about the world
  - Individual Differences
  - Culturally Influenced

- Potentially disruptive (seismic) event
  - Centrality of event

- Emotional distress increased by challenges
  - Assumptive core beliefs challenged
  - Assumptive core beliefs provide context for the event

- Resistance
  - Pre-event functioning

- Emotional distress mitigated by beliefs
  - Resilience
  - Pre-event functioning

- Rumination
  - Mostly automatic, intrusive
  - Manage Emotional Distress and Coping
    - Redirect rumination
    - Reassess goals

- Self-Analysis
  - Reflect/write/pray etc.

- Self-Disclosure
  - Talk/share/express

- Sociocultural Influences
  - Proximate: Social support/Role models/Support for schema change, growth
  - Distal: Cultural/Societal themes

- Ruminations
  - Deliberate/reflective/constructive
  - Schema change / Narrative revision

- Acceptance of changed world

- Distress
  - Intermittent, ongoing

- Posttraumatic Growth (outcome)
  - Relationships with others
  - New possibilities
  - Personal strength
  - Spiritual/existential beliefs
  - Appreciation of life

- Changed narrative
  - Become more resilient
  - Expanded coping repertoires
  - Increased wisdom
  - Compassion
  - Acts of service, etc.
Recent Developments

• Measurement

• Posttraumatic Growth Inventory Expanded (Adult version with expanded items measuring existential themes of growth)
• Posttraumatic Growth and Depreciation Inventory (Mirrored 50 items assessing both positive and negative change)
• Core Beliefs Inventory (Degree of challenge to core beliefs about predictability, control, benevolence, etc.)
• Event Related Rumination Inventory (Intrusive and deliberate rumination)
Some things to remember about PTG

• It’s not the trauma, it’s the struggle.
• People first struggle to survive, not grow.
• Psychological fitness, distress and PTG: It’s curvilinear.
• There are different PTG trajectories, but stability is the norm
• PTG and PTSD coexist.
Using the PTG Model to Create Interventions

• An Existential, Cognitive, Narrative Integration--Can be integrated with other approaches to PTSD

•
Using the PTG Model to Create Interventions

• An Existential, Cognitive, Narrative Integration--Can be integrated with other approaches to PTSD

• Based on the perspective: “It’s not what’s wrong, it’s what happened”
Using the PTG Model to Create Interventions

- An Existential, Cognitive, Narrative Integration--Can be integrated with other approaches to PTSD
- Based on the perspective: “It’s not what’s wrong, it’s what happened”
- Therapy, education, self-help approaches can be derived from the model
Using the PTG Model to Create Interventions

• An Existential, Cognitive, Narrative Integration--Can be integrated with other approaches to PTSD
• Based on the perspective: “It’s not what’s wrong, it’s what happened”
• Therapy, education, self-help approaches can be derived from the model
• The facilitator is an Expert Companion
5 elements of PTG intervention/facilitation

• First described by Tedeschi & McNally (American Psychologist, 2011)
• Expanded by Calhoun & Tedeschi into book (Posttraumatic Growth in Clinical Practice, 2013)
• A Self-Help version by Tedeschi & Moore (Posttraumatic Growth Workbook, 2016)
• Complete review in Tedeschi, Shakespeare-Finch, Taku, & Calhoun (Posttraumatic Growth: Theory, Research, and Application, 2018)
Part 1: Understanding trauma response as a precursor to PTG

• Shattered beliefs form the foundation for later posttraumatic growth.
• Basic physiological and psychological responses are *normal* in trauma. For example, combat stress:
  • Combat stress is perceived as greatest before and after battle--dread and fatigue.
  • During fighting, soldiers practice controlled mental and emotional disengagement, becoming as numb and unaware as possible to survive--an emotional and physiological reaction to extraordinary stress of an entire deployment or one firefight.
• These reactions do not indicate a defect in one’s character, or identity.
Part 2: Emotion Regulation Enhancement

• Managing dysregulated sympathetic nervous system responses and intrusive thinking
  • Responses that are adaptive for survival in combat can provoke long-term maladaptive functioning:
    • behavioral and emotional effects of circulating norepinephrine, epinephrine and cortisol (stress hormones) sustain the body’s alarm reaction
    • jitteriness, hypervigilance, sleep disruption, appetite suppression, etc.
  • Encouraging reflective rumination in contrast to brooding.
Part 3: Constructive self-disclosure.

- Allowing emotional support, coherent trauma narrative, models for healthy trauma response and posttraumatic growth.
- *Telling the story* of the trauma, but especially the experience of the *aftermath* of trauma.
- Learning how to use social connections and establish new ones.
Part 4. Creating a trauma narrative with PTG domains.

• Organizing the story of trauma into a coherent narrative with the trauma as a catalyst, turning point;

• Appreciating paradox—”opposites” can coincide
  • loss & gain
  • support & individual strength
  • control & lack of control
  • grief & gratitude
  • vulnerability & strength

• Referring to the five domains of posttraumatic growth, with stories of others to illustrate the possibility of change.
Part 5: Developing life principles that are robust to challenges.

- Finding ways to serve, be altruistic;
- Accepting growth without guilt as benefiting others. Honoring deceased comrades can mitigate guilt;
- Accepting social identity as a trauma survivor, or compassionate, wise person, somewhat separate from others, but more closely connected to the human condition;
- Considering the ancient Greek/Roman concept of the hero as an ordinary person who experiences an extraordinary event, survives it, and returns to the everyday world to express an important truth about life.
Now applied in a non-clinical veterans program for military to civilian reintegration

• Four important healing factors:
  • Place
  • Philosophy
  • People
  • Program
Now applied in a non-clinical veterans program for military to civilian reintegration

• The place is Boulder Crest Retreat, Bluemont, Virginia, USA
Now applied in a non-clinical veterans program for military to civilian reintegration

• The place is Boulder Crest Retreat, Bluemont, Virginia, USA

• The philosophy is based on the PTG perspective
Now applied in a non-clinical veterans program for military to civilian reintegration

• The place is Boulder Crest Retreat, Bluemont, Virginia, USA
• The philosophy is based on the PTG perspective
• The people are veterans and civilian trainers in meditative and recreational practices, working with 6 person groups of veterans
Now applied in a non-clinical veterans program for military to civilian reintegration

• The place is Boulder Crest Retreat, Bluemont, Virginia, USA

• The philosophy is based on the PTG perspective

• The people are veterans and civilian trainers in meditative and recreational practices, working with 6 person groups of veterans

• The program is Progressive and Alternative Training for Healing Heroes: Warrior PATHH
First PTG-based Program
Warrior PATHH and PTG

WARRIOR PATHH

The nation’s first non-clinical program to cultivate and facilitate PTG.

- 18 month program – initiated with 7-day training program
- Supported by monthly video conferences, regular calls, peer accountability and MY PATHH
- Designed and led by combat veterans and civilian trainers
- Harnesses unique skills and abilities possessed by combat veterans
The Five Phases

- Education
- Service
- Regulation
- Story
- Disclosure

Trust and Connection
Education

Identify the physical and psychological impacts of combat stress; Examine the ways in which struggle can lead to opportunities for growth and transformation

<table>
<thead>
<tr>
<th>“Symptoms”</th>
<th>TRAINING</th>
<th>THRIVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperalert, hypervigilant</td>
<td>Sharply tuned threat perception, rapid reflexes</td>
<td>Make thoughtful decisions, Outthink others, Lead, Follow, Empathize, Perceive, Appreciate Life</td>
</tr>
<tr>
<td>Reliving combat events, guilt, second guessing</td>
<td>Intense mission preparation, rigorous training, AARs</td>
<td>Discipline, Work Ethic, Honesty, Purpose, Service, PhD in GSD</td>
</tr>
<tr>
<td>Intolerance of mistakes</td>
<td>Attention to details, minimize mistakes</td>
<td>Attention to Detail, Integrity</td>
</tr>
<tr>
<td>Anger</td>
<td>Adrenaline / intensity to accomplish the mission</td>
<td>Stamina, Endurance, Focus, Perseverance, Persistence, Commitment, Personal Strength</td>
</tr>
<tr>
<td>Detached, numb</td>
<td>Emotional control in combat</td>
<td>Level Headedness, Bearing, Courage</td>
</tr>
<tr>
<td>Social Withdrawal</td>
<td>Unit cohesion, unit is family</td>
<td>Deeper Relationships, Authenticity, Sense of community, Loyalty, Brotherhood/Sisterhood, Team Orientation</td>
</tr>
</tbody>
</table>
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.
Emptying the Rucksack
Story

Create a positive, forward-looking personal story that integrates past, present and future
1. To Organize and Make Sense of Our Experiences + Reshape Our Core Beliefs
2. To Realize We Are Not Alone/Special In Our Struggle

3. To Make Meaning Of Our Struggle by Using It To Help Others Who Struggle
Service

Develop a plan for continued service – to self, team, family, community and country – at home
This place helped me not only find out who exactly I am, but helped me re-discover my connection to this world. Aside from the numerous outdoor activities such as archery and kayaking, I and 5 other combat vets, came to the understanding that it is not what is wrong with us, but what happened to us. Once we understood this, we dumped that series of events into the void that is the past, and created a new direction for me to move towards. With this direction, I can now walk through this life with my family by my side, unafraid and alive with passion and purpose."

Warrior PATHH Graduate
Program Evaluation
PE-Structure

• Survey at 7 time points:
  – Initial; 7 day; 30 day; 90 day; 6mo; 12 mo; 18 mo

• Evaluation focuses on three primary domains:
  – Clinical symptoms/psychopathology
  – Stress management and coping (Living scales)
  – Growth/cognitive flexibility
• Consists of 7 existing and novel measures

• Primary measures include:
  – PTSD Checklist for DSM-5 (PCL-5); 20-item self-report measure that assesses the 20 DSM-5 symptoms of PTSD. Uses include screening, diagnosis and symptom change.

  – Depression, Anxiety, Stress Scale (DASS-21); 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.”

  – Insomnia Severity Index (ISI); 7-item self-report questionnaire assessing the nature, severity, and impact of insomnia in the past month.

• Other measures include:
  – Brief Michigan Alcohol Screening Test
  – Drug Abuse Questionnaire
  – Positive and Negative Affect Schedule
• Consists of 10 existing and novel measures

• Primary measures include:
  – Perceived Stress Reactivity Scale (PSRS); 23-item questionnaire with one overall measure of stress reactivity, and 5 subscales: Prolonged Reactivity, Reactivity to Work Overload, Reactivity to Social Conflicts, Reactivity to Failure, and Reactivity to Social Evaluation.

  – The Ego Resiliency Scale (ER89); 14 item measure of the ability to adapt level of control to situational context, or adaptive flexibility. People who are ego-resilient experience more positive affect, self-confidence and psychological adjustment.

  – Couples Satisfaction Index (CSI); 4 item measure assessing relationship satisfaction.

• Other measures include:
  – The Multidimensional Scale of Perceived Social Support
  – Employment, finance, physical activity, nutrition, and legal
PE-Growth/Cog Flexibility

- Consists of 7 existing and novel measures

- Primary measures include:
  - Posttraumatic Growth Inventory-Expanded (PTGI-X); 25-item scale that measures the extent to which individuals report positive psychological change as a result of experiencing a traumatic event (possibilities, strength, others, appreciation, spiritual-existential.

  - Gratitude Questionnaire-Six Item (GQ-6); 6-item scale that measures the general construct of gratefulness.

  - Core Beliefs Inventory (CBI); 9-item inventory that is designed to assess the degree to which a specific traumatic event has disrupted one’s core beliefs about oneself, others, and the world.
PE Outcomes-Symptoms
• Average PCL-5 score of PATHH attendees for the Initial time point is 40
• Average PCL-5 score of PATHH attendees for the Initial time point is 40

• Average score for the 12 month time point is 20
• Average PCL-5 score of PATHH attendees for the Initial time point is 40

• Average score for the 12 month time point is 20

• 50% reduction in PCL-5 scores from Initial to 12 months
• Average PCL-5 score of PATHH attendees for the Initial time point is 40

• Average score for the 12 month time point is 20

• 50% reduction in PCL-5 scores from Initial to 12 months

• 24/41 attendees (56%) met criteria for "likely PTSD" prior to attending PATHH
• Average PCL-5 score of PATHH attendees for the Initial time point is 40

• Average score for the 12 month time point is 20

• 50% reduction in PCL-5 scores from Initial to 12 months

• 24/41 attendees (56%) met criteria for "likely PTSD" prior to attending PATHH

• 5/41 attendees (12%) met criteria for "likely PTSD" 12 months post-PATHH

*n=41
PE Data-Symptoms (12 Month)

- Average DASS 21--Depression Scale score for Initial time point is 16 (Moderate severity)
- Average DASS 21--Depression Scale score for Initial time point is 16 (Moderate severity)

- Average score for the 12 month time point is 8 (Normal-no depression)
Average DASS 21--Depression Scale score for Initial time point is 16 (Moderate severity)

Average score for the 12 month time point is 8 (Normal-no depression)

50% reduction in DASS 21-Depression scores from Initial to 12 months
PE Data-Symptoms (12 Month)

- Average DASS 21--Depression Scale score for Initial time point is 16 (Moderate severity)

- Average score for the 12 month time point is 8 (Normal-no depression)

- 50% reduction in DASS 21-Depression scores from Initial to 12 months

- 22/41 PATHH participants (54%) met criteria for "Moderate-Severe-Extremely Severe" levels of depression prior to attending PATHH
- Average DASS 21--Depression Scale score for Initial time point is 16 (Moderate severity)

- Average score for the 180 day time point is 8 (Normal-no depression)

- 50% reduction in DASS 21-Depression scores from Initial to 12 months

- 22/41 PATHH participants (54%) met criteria for "Moderate-Severe-Extremely Severe" levels of depression prior to attending PATHH

- 10/41 attendees (24%) met criteria for "Moderate-Severe-Extremely Severe" levels of depression 12 months post-PATHH
- Average DASS 21--Anxiety Scale score for Initial time point is 13 (Moderate severity)
• Average DASS 21--Anxiety Scale score for Initial time point is 13 (Moderate severity)

• Average score for the 12 month time point is 7 (Normal-no anxiety)
- Average DASS 21--Anxiety Scale score for Initial time point is 13 (Moderate severity)

- Average score for the 12 month time point is 7 (Normal-no anxiety)

- 46% reduction in DASS 21-Anxiety scores from Initial to 12 months
PE Data-Symptoms (12 Month)

- Average DASS 21--Anxiety Scale score for Initial time point is 13 (Moderate severity)

- Average score for the 12 month time point is 7 (Normal-no anxiety)

- 46% reduction in DASS 21-Anxiety scores from Initial to 12 months

- 20/41 (49%) participants met criteria for "Moderate-Severe-Extremely Severe" levels of anxiety prior to attending PATHH
• Average DASS 21--Anxiety Scale score for Initial time point is 13 (Moderate severity)

• Average score for the 12 month time point is 7 (Normal-no anxiety)

• 46% reduction in DASS 21-Anxiety scores from Initial to 12 months

• 20/41 (49%) participants met criteria for "Moderate-Severe-Extremely Severe" levels of anxiety prior to attending PATHH

• 14/41 attendees (34%) met criteria for "Moderate-Severe-Extremely Severe" levels of anxiety 12 months post-PATHH
Average DASS 21--Stress Scale score for the Initial time point is 20 (Moderate severity)
PE Data-Symptoms (12 Month)

- Average DASS 21--Stress Scale score for the Initial time point is 20 (Moderate severity)

- Average score for the 12 month time point is 12 (Normal-no stress)
Average DASS 21--Stress Scale score for the Initial time point is 20 (Moderate severity)

Average score for the 12 month time point is 12 (Normal-no stress)

45% reduction in DASS 21-Stress scores from Initial to 12 months
- Average DASS 21--Stress Scale score for the Initial time point is 20 (Moderate severity)

- Average score for the 12 month time point is 12 (Normal-no stress)

- 45% reduction in DASS 21-Stress scores from Initial to 12 months

- 22/41 participants (54%) met criteria for "Moderate-Severe-Extremely Severe" levels of stress prior to attending PATHH
- Average DASS 21--Stress Scale score for the Initial time point is 20 (Moderate severity)

- Average score for the 12 month time point is 12 (Normal-no stress)

- 45% reduction in DASS 21-Stress scores from Initial to 12 months

- 22/41 participants (54%) met criteria for "Moderate-Severe-Extremely Severe" levels of stress prior to attending PATHH

- 8/41 attendees (20%) met criteria for "Moderate-Severe-Extremely Severe" levels of stress at 12 months
PE Outcomes-Living
Average Perceived Stress Reactivity Scale (PSRS) score at Initial time point is 25 (a moderate degree of stress reactivity)

- Average score at 12 months is 19 (low degree of stress reactivity)
- 24% decrease in stress reactivity

Average Ego Resiliency Scale score at Initial time point is 38 (a low level of resilience)

- Average score at 12 months is 44 (a high average level of resilience)
- 16% increase in ego resiliency
PE Outcomes-Growth
Average Posttraumatic Growth Inventory-Expanded (PTGI-X) score for Initial time point is 51 (a small degree of personal growth)

-- Average score at the 12 month time point is 77 (a moderate degree of growth)

-- 51% increase in PTG scores from Initial to 12 months
Summary

- Warrior PATHH program is reducing symptoms of depression, anxiety, stress, insomnia, and PTSD to a significant degree.

- PATHH participants are better able to find meaning associated with their trauma and more successful at managing stress and negative emotions.

- Improvements are maintained at 12 months; 18 month data reveal similar results.

- Results can be replicated if fidelity of the current PATHH program is maintained.
Further Reading
