

## Post-traumatic Growth

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### *The Impact of Trauma*

For centuries, man has pondered what sustains the human spirit in times of extreme adversity. Many ancient traditions speak of the potential for transcending suffering and transforming it into a resource for internal strength and growth. Trauma can be defined as an event that profoundly changes an individual's fundamental schemas, beliefs, and goals, as well as the ability to manage emotional distress, and it profoundly affects the individual's life narrative.<sup>1</sup>

With more than 2 million men and women having deployed to Iraq and Afghanistan within the last 12 years, rates of military-related post-traumatic stress disorder (PTSD) diagnoses have increased over 20 percent.<sup>2</sup> Response to a traumatic event can vary greatly from individual to individual. For many, exposure to highly stressful events can result in significant psychological distress and some may develop psychiatric disorders.<sup>3</sup> During this time, survivors may feel an increased sense of hopelessness, depression and vulnerability.

Although traumatic experiences can sometimes result in severe psychological distress, they can also result in positive psychological changes as a result of the trauma survivors' struggle with the trauma. Also known as post-traumatic growth (PTG), these positive changes may include the development of new perspectives and personal growth.<sup>4</sup> Current studies have shown that 30% to 90% of people report some positive changes following trauma.<sup>5</sup> Given the increase in combat-related traumatic exposures in the past decade, PTG and its relationship with psychological health has become an area of interest to the military and psychology communities. This paper will define and describe PTG, as well as discuss recent research highlighting the various factors related to PTG and its relationship to mental health.

### *What is Post-traumatic Growth?*

PTG is the subjective experience of positive psychological change reported by an individual as a result of the struggle with trauma.<sup>6</sup> Some theorize it is a coping style, while others think of PTG as an outcome of coping with traumatic stress. Several researchers acknowledge PTG can be both a coping style and coping outcome.<sup>6</sup> Several characteristics of PTG have been described in the literature, and several scales have been developed to measure PTG as a uni-dimensional or multidimensional construct. One of the better known scales, the Post-traumatic Growth Inventory (PTGI), measures five broad domains that comprise a significant amount of the variance in PTG: a greater appreciation of life, closer relationships, identification of new possibilities, increased personal strength, and positive spiritual change.<sup>7</sup> Greater appreciation of life following a traumatic event can be represented by a shift in priorities and taking pleasure in aspects of life that were once taken for granted. Trauma survivors may also experience

increased compassion and empathy for others, which allow them to cultivate deeper and more meaningful relationships. Identification of new possibilities and increased personal strength can also be seen in trauma survivors who display high levels of PTG.<sup>1</sup> For example, an individual may display higher levels of self-efficacy or a stronger belief in his or her ability to overcome obstacles. The same individual may experience a change in values post-trauma and find that he or she is able to identify a more fulfilling path for the future. Finally, trauma survivors may also experience a positive change in spirituality, perceiving themselves as being more capable of connecting with something greater than themselves (God, the universe, nature, etc.), regardless of religious affiliation.<sup>1</sup>

### *Factors Influencing Post-traumatic Growth*

Some demographic and event-related differences have been reported in PTG research, although evidence remains mixed. Several studies have found that women report more growth than men, and some studies have found younger age correlating with more growth compared to older age.<sup>8</sup> Some studies have also suggested that PTG tends to be associated with higher levels of income and education, and perceived threat of harm seems to be more indicative of growth compared to type or severity of trauma.<sup>8</sup>

A number of personality factors have also been linked to PTG. A five-factor model has been widely-adopted in order to address the various dimensions of personality: extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience.<sup>9</sup> Not surprisingly, meta-analyses link extraversion, openness to experience, and agreeableness to higher levels of PTG. Conversely, high levels of neuroticism have been linked to low levels of PTG.<sup>1</sup> Researchers found that individuals who possessed high levels of extraversion, openness to experience and agreeableness also possessed effective coping skills and were more likely to seek social support.<sup>9</sup>

Several coping styles have evidence of being predictors of PTG, including acceptance coping, positive reappraisal coping, religious or spiritual coping, seeking social support coping, and problem- and emotion-focused coping.<sup>8,9</sup> Positive reappraisal coping, in particular, or the individual's ability to cognitively reappraise the traumatic event in a positive light, has been theorized as essential for PTG and for successful adaptation to traumatic events.<sup>9</sup>

Regarding religious or spiritual coping practices, recent research has examined the relationship between the use of prayer as a form of coping and PTG. In one study, 327 trauma survivors completed questionnaires assessing trauma history, prayer coping functions, and PTG. The researchers found that participants who prayed for "calm and focus" showed the highest positive correlation to PTG.<sup>10</sup> The participants who reported high levels of prayer for calm and focus were also more likely to use meditation and reflection to effectively transition from ruminative and anxiety-ridden thinking to making meaning from the traumatic experience.

The cognitive processes of rumination and meaning-making have also been linked to greater PTG,<sup>9</sup> which are indicative of the thought processing that often happens after the trauma as survivors struggle to make sense out of the experience. The type of deliberate, constructive ruminative thinking that may promote PTG should be distinguished from automatic, maladaptive rumination often linked to emotional

distress. One group of PTG researchers has proposed that emotional distress post-trauma triggers rumination that begins as automatic and intrusive, but after some success in coping with the distress, rumination transforms into more deliberate thinking about the trauma. This type of rumination can involve meaning-making and reappraisal of the situation, which may lead to perceived PTG.<sup>11</sup>

Lastly, hope is another factor linked to PTG. Although the notion of hope appears to be a central construct in measuring PTG, researchers have long struggled with finding ways to effectively measure it. According to hope theory, development of an individual's hope disposition occurs during early childhood. In a recent study examining the importance of hope among trauma survivors, 1,025 participants were assessed according to the Dispositional Hope Scale (DHS). Results showed that childhood trauma was associated with significantly lower levels of hope as an adult and consequently, lower levels of PTG following a traumatic event in adulthood.<sup>12</sup> These findings suggest that individuals who have not experienced childhood trauma may be more likely to develop PTG following trauma as adults.

#### *PTG and its Relationship to Mental Health*

PTG and psychiatric conditions often co-occur in trauma survivors as they attempt to adapt to the trauma, reporting both negative and positive changes as a result of the trauma. It is important to note that PTG and psychopathological conditions are independent constructs, as domains of growth are conceptually distinct from general emotional adjustment.<sup>6</sup> PTG does not necessarily imply a decrease in psychological symptoms.

The role that PTG plays in adapting to trauma and its relationship to psychological adjustment is just beginning to be elucidated. Most cross-sectional studies have found no relationship between PTG and PTSD, although a few have found either negative or positive relationships between the two constructs. However, two longitudinal studies found that PTG at first assessment predicted fewer PTSD symptoms at second assessment.<sup>6</sup> Likewise, most cross-sectional studies have found no relationship between PTG and depression, but one longitudinal study found that PTG predicted less depression symptoms at a later assessment.<sup>6</sup> Additionally, there is some preliminary evidence from longitudinal studies that suggests positive changes post-trauma may predict less emotional distress.<sup>13,14</sup> Two military studies have also found that PTG may protect against suicidal ideation among service members with combat experience.<sup>15,16</sup> The evidence that PTG has a role in adapting to trauma in a way that promotes the decrease of psychological distress over time is inconclusive, although preliminary evidence warrants further research.

#### *Summary*

The concept of post-traumatic growth is still in the early stages of being defined and investigated, but preliminary evidence suggests that personality style and coping mechanisms may play a significant role.<sup>7</sup> While it may seem paradoxical, the life-altering negative effects of trauma can often be a catalyst for positive changes as trauma survivors attempt to rebuild their lives and worldviews after the event. PTG is still a somewhat controversial idea, as some researchers consider PTG an illusion<sup>17</sup> or report that

perceived PTG does not represent actual growth.<sup>14</sup> Other researchers argue that PTG is unlikely to be an illusion<sup>18</sup> and report that perceived PTG and actual positive behavior change have been corroborated by these trauma survivors' significant others.<sup>19</sup> It is agreed that much more research is needed to clarify the concept of PTG and the role it may play in reducing emotional distress or psychological symptoms over time. While PTG needs further study, current findings suggest there may be clinical utility for the concept.<sup>6,20</sup>

Clinicians treating active-duty service members, veterans, and others who have been exposed to trauma should be aware of the possibility of and factors contributing to growth in their patients. Indeed, an evaluation of the patient's willingness to seek support from others, personality style, and coping strategies may be an important part of the treatment process. Perceptions of growth among trauma survivors should be identified and supported by therapists, encouraging active growth as part of the recovery process among patients who perceive PTG. It is important, however, not to force growth from the trauma, as there is no evidence currently that PTG is necessary for trauma recovery. As PTG research progresses, it may be possible to design evidence-based therapeutic interventions incorporating PTG, with the goal of promoting positive changes, not just reduction of symptoms, in the trauma recovery process.

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