

## **Post-Traumatic Growth: A Brief Theoretical Overview**

Here we provide you with an overview of the main theoretical perspectives on posttraumatic growth. This is by no means intended to be an exhaustive list or a comprehensive account of each perspective. The interested reader is referred to the relevant journal articles for a more comprehensive account of each perspective, or to Jayawickreme & Blackie (2014). We have organized the different theories of adversarial growth into three broad categories: “shattered assumptions” theories, personality-based accounts, and growth as coping-based accounts.

### **Key references**

- Jayawickreme, E. & Blackie, L.E.R. (2014). Posttraumatic Growth as Positive Personality Change: Evidence, Controversies and Future Directions. *European Journal of Personality*, 28, 312-331.
- Jayawickreme, E., Forgeard, M.J.C. & Blackie, L.E.R. (2015). Personality Science, Resilience, and Posttraumatic Growth. *Behavioral and Brain Sciences*. 38, e105  
doi:10.1017/S0140525X14001551
- Blackie, L. E. R., Jayawickreme, E., Helzer, E.G., Forgeard, M. J. C., & Roepke, A. M. (2015). Investigating the Veracity of Self-Perceived Post-Traumatic Growth: A Profile Analysis Approach to Corroboration. *Social and Personality Psychological Science*, 6, 788-796.
- Blackie, L.E.R., Jayawickreme, E., Tsukayama, E., Forgeard, M.J.C., Roepke, A.M., & Fleeson, W. (2016) Post-Traumatic Growth as Positive Personality Change: Developing a Measure to Assess Within- Person Variability, *Journal of Research in Personality*, doi: <http://dx.doi.org/10.1016/j.jrp.2016.04.001>

### **Trauma-based accounts of growth from “shattered assumptions”**

#### **Posttraumatic Growth**

Posttraumatic growth (the term used in this body of literature) is triggered by highly stressful life events that pose a significant challenge to an individual’s assumptive beliefs about the world. Most people have a general set of beliefs about the predictability, controllability, and benevolence of the world that they use to guide their behavior and make sense of why things happen in their lives. Adverse events however have the power to challenge the validity of these beliefs and cause individuals to question their understanding of the world as well as their place in it, a process which is usually accompanied by high levels of psychological distress. These stressful life events can shatter an individual’s prior assumptive beliefs about the world. The metaphor of an earthquake is sometimes used by researchers to convey the suddenness and force with which assumptive beliefs are shattered. According to this theory, posttraumatic growth occurs when individuals attempt to come to terms with the event and rebuild their assumptive world. Similar to rebuilding after an earthquake, individuals who have experienced highly stressful events have the opportunity to think carefully about how they want to rebuild their lives. By taking into account the changed reality of their life circumstances, the inherent complexity and fragility of the human condition, as well as the knowledge that they have survived the event and associated distress, individuals can develop adaptive beliefs that will lead them to be more

resilient in the face of future challenges. During this process, individuals often identify new characteristics and strengths. While none of the individuals who have lived through highly stressful events would ever choose to relieve these circumstances, many of them recognize that these events have changed them in positive ways. By integrating these positive changes into their life stories, individuals become aware that they have grown in important and meaningful ways.

### **Key references**

1. Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15, 1-18.
2. Calhoun, L. G., Cann, A., & Tedeschi, R. G. (2010). The Posttraumatic Growth Model: Sociocultural considerations. In T. Weiss & R. Berger (Eds.), *Posttraumatic growth and culturally competent practice* (pp. 1-14). Hoboken, NJ: Wiley & Sons.
3. Janoff-Bulman, R. (1992). *Shattered assumptions*. New York: Free Press.
4. Janoff-Bulman, R. (2006). Schema-change perspectives on posttraumatic growth. In L.G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth* (pp. 81-99). Mahwah, NJ: Erlbaum.

### **Organismic Valuing Theory**

According to Organismic Valuing Theory, adversarial growth (the term used in this body of literature) occurs after a highly stressful life event, because individuals have an inherent tendency to comprehend and integrate their experiences in a meaningful way while striving towards optimal well-being. In this theory, adversarial growth is seen as equivalent to the experience of psychological well-being. The theory proposes that there are at least three possible outcomes to adverse life events depending on how the individual processes the new trauma-related information. Following an experience of personal adversity an individual can either “assimilate” the trauma-related information by integrating the experience into beliefs or worldviews that they held prior to the event, or they can “accommodate” the trauma-related information by modifying their prior worldviews in light of their experience. If an individual assimilates the experience into their prior beliefs about the world (e.g., bad things just happen), they can recover from the trauma, but recovery simply marks a return to pre-trauma levels of well-being. The individual does not grow psychologically from their experience, and he/she remains vulnerable to future stressors. If the individual accommodates the trauma-related information in a negative way (e.g., bad things happen and there is nothing anyone can do to prevent them), they experience greater feelings of hopelessness and have a higher likelihood of experiencing post-traumatic stress and/or depression. However, if the individual accommodates the trauma-related information in a positive way and modifies their prior worldview appropriately (e.g., life is unpredictable, so it should be lived to the fullest), they can experience psychological growth in the aftermath of adversity. In this model, positive benefit-finding and psychological growth is facilitated by many factors including the satisfaction of basic psychological needs (i.e., the need for affiliation, autonomy, and competency) and supportive social environments.

### **Key references**

1. Joseph, S., & Linley, A. P. (2005). Positive adjustment to threatening events: An organismic valuing theory of growth through adversity. *Review of General Psychology*, 9, 262-280.

2. Joseph, S., Maltby, J., Wood, A. M., Stockton, H., Hunt, N., & Regel, S. (2011). The psychological well-being – Posttraumatic changes questionnaire (PWB-PTCQ): Reliability and validity. *Psychological Trauma: Theory, Research, Practice, and Policy*, 15, 1-9.

### **Personality-based accounts of positive change following adversity**

#### **Deviation Amplification Model**

According to the deviation amplification model the psychological resources, skills, and personality traits of an individual play an important role in determining whether the individual is more or less likely to be able to find long-term and positive benefits from highly stressful and challenging life events. The model proposes that the stress response is regulated by two processes: deviation countering and deviation amplification. The deviation countering process functions using negative feedback loops and is similar to homeostatic processes. For example, an increase in blood pressure is countered by biological processes that lower blood pressure back to optimal levels. In contrast, deviation amplification processes function via positive feedback loops that magnify small changes. Severe stressors such as diagnosis with terminal illness or death of a loved one, for example, are believed to be regulated by amplification processes resulting in either positive or negative spirals depending on whether small changes in adaptive or maladaptive coping responses are magnified. The deviation amplification model predicts that major life stressors can have long-lasting effects on an individual's personality, especially processes such as self-esteem and personal mastery. Specifically, people who have higher levels of self-esteem or personal mastery before encountering the stressor are likely to engage in more adaptive styles of coping, resulting in a greater frequency of positive long-term effects and increases in personal mastery. In contrast, people who have lower levels of self-esteem or personal mastery initially are likely to engage in more maladaptive styles of coping, resulting in poorer outcomes.

#### **Key references**

1. Aldwin, C.M., Sutton, K.J., & Lachman, M. (1996). The development of coping resources in adulthood. *Journal of Personality*, 64, 837-871.
2. Updegraff, J.A., & Taylor, S.E. (2000). From vulnerability to growth: Positive and negative effects of stressful life events. In J. Harvey & E. Miller (Eds.) *Loss and Trauma: General and close relationship perspectives* (pp.3-28). Philadelphia, PA: Brunner-Routledge.

#### **Stress Inoculation and Resilience Approaches**

According to this approach, one positive outcome that can result from an experience of adversity is the ability to be able to better cope with subsequent stressors. Essentially, a history of past success at effectively coping with moderate-level stressors is predicted to enhance resilience and inoculate the individual against some of the potentially distressing consequences of subsequent stressors. This approach argues that the “silver lining” to stressful experiences is the ability to more effectively handle future adversity. From this perspective, individuals with a history of some lifetime adversity are predicted to show a greater propensity for resilience, lower global distress, lower functional impairment, fewer symptoms of posttraumatic stress disorder, and higher life satisfaction over time, compared to individuals with no experience of adversity and those with high cumulative lifetime adversity. Thus, with regards to moderate-level stressors, this approach claims that whatever doesn't kill us can make us stronger.

### **Key references**

1. Meichenbaum, D. (1985). *Stress inoculation training*. New York: Pergamon.
2. Seery, M.D., Holman, A.E., Cohen, S. R. (2010). Whatever does not kill us: Cumulative lifetime adversity, vulnerability, and resilience. *Journal of Personality and Social Psychology*, 99, 1025-1041.
3. Seery, M.D. (2011). Resilience: A silver lining to experiencing adverse life events. *Current Directions in Psychological Science*, 20, 390-394.
4. Updegraff, J.A., & Taylor, S.E. (2000). From vulnerability to growth: Positive and negative effects of stressful life events. In J. Harvey & E. Miller (Eds.) *Loss and Trauma: General and close relationship perspectives* (pp.3-28). Philadelphia, PA: Brunner-Routledge.

### **Perceived Growth as a Coping Strategy**

#### **Cognitive Adaptation Theory**

According to this theory, stressful and threatening life events challenge an individual's self-esteem, sense of personal control, and optimism about the future. In an effort to cope with and adjust to these threatening experiences, individuals tend to rely on cognitive strategies that enable them to restore and enhance their self-esteem, perception of control, and optimism. For example, a cancer patient might try to enhance their self-esteem by comparing their recovery to other individuals who are less fortunate, or boost their optimism by inflating their chances of entering remission. In this theory, successful adaptation to threatening experiences is based on the individual's ability to develop and maintain a set of "positive illusions". It is the ability to form these positively distorted beliefs or "illusions" in the aftermath of adversity that provides an individual with protection in the initial stages of threat and allows them to eventually come to terms with and accept their situation. Research has shown that positive illusions – the ability and resources used to restore a person's self-esteem, control, and optimism – offer protective benefits both for psychological adaptation to threatening experiences and physical health (e.g., slower temporal course of illness). It is important to note that positive illusions only represent modest departures from reality, as feedback from the environment keeps the individual from distorting their beliefs too dramatically. In summary, cognitive adaptation theory proposes that individuals respond to threatening life events by developing a protective set of positive illusions pertaining to their self-esteem, personal control, and optimism that help them to return to (or exceed) pre-trauma levels of psychological functioning.

### **Key references**

1. Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, 38, 1161-1173.
2. Taylor, S. E., & Armor, D. A. (1996). Positive illusions and coping with adversity. *Journal of Personality*, 64, 873-898.
3. Taylor, S. E., Kemeny, M. E., Reed, G., Bower, J. E., & Gruenewald, T. L. (2000). Psychological resources, positive illusions, and health. *American Psychologist*, 5, 99-109.

#### **The Janus-Face-Model of Self-Perceived Growth**

According to this model, posttraumatic growth has both a functional, constructive side and an illusory, self-deceptive side. The functional or constructive side of posttraumatic growth is

depicted in trauma-based theories of growth (e.g., assumptive world theory and organismic valuing theory) that have shown that individuals often report positive changes after a stressful life event. For example, many people report feeling stronger, more resilient, or wiser. In contrast, the illusory or self-deceptive side of posttraumatic growth is depicted in the literature on positive illusions that has shown that people cope with threatening situations by positively distorting their perception of the event or themselves. For example, people tend to exaggerate their sense of control and hold unrealistic optimistic expectations about the future. The Janus-face-model is essentially an attempt to offer a comprehensive account of posttraumatic growth by integrating these conflicting areas of research. In this model, illusory and constructive posttraumatic growth are believed to co-exist, each unfolding over a different time course with independent relationships to psychological adjustment. The illusory perception of growth is not necessarily maladaptive; when illusory perceptions of growth coexist with active and deliberate reflection of the trauma then illusory growth represents an adaptive coping response to reduce distress in the short-term. However, when the illusory component coexists with attempts to avoid thinking about the trauma, then self-reported growth is likely to reflect cognitive avoidance rather than actual positive change. The functional and constructive side of growth is associated with actual change and is therefore related to greater adjustment and well-being in the long term. The model posits that in successful adaptation to trauma the constructive side of posttraumatic growth increases over time while the illusory perceptions of growth decrease.

### **Key references**

1. Maercker, A. & Zoellner, T. (2004). The Janus face of self-perceived growth: Toward a two component model of posttraumatic growth. *Psychological Inquiry*, 15, 41-48.
2. Zoellner, T. & Maercker, A. (2006). Posttraumatic growth in clinical psychology – A critical review and introduction of a two component model. *Clinical Psychologyreview*, 26, 626-653.

### **Action Growth**

According to the Action Growth Approach, a stressful or traumatic life event often results in high levels of psychological distress, because such an event poses a significant challenge to the individual's psycho-social resources (e.g., self-esteem, health, and social support networks). While this model acknowledges that self-reported experiences of growth often occur after adversity, it argues that posttraumatic growth does not simply result from cognitive attempts to find meaning and re-structure assumptive beliefs about the world. For posttraumatic growth to occur individuals must translate these cognitive benefit-finding processes into action. Similar to other perspectives described earlier, posttraumatic growth has two possible manifestations – an illusory coping side and a functional and constructive side. The model claims that the illusory side of posttraumatic growth (i.e., cognitive attempts to find positive benefits in adversity) might simply function as a coping mechanism in the aftermath of extreme stress, and not necessarily translate into real positive change. Alternatively, real and constructive side of posttraumatic growth can offer a protective function against negative outcomes such as posttraumatic stress disorder, but only when individuals attempt to integrate these perceived positive benefits into their subsequent behaviors.

### **Key references**

1. Hobfoll, S. E., Hall, B. J., Canetti-Nisim, D., Galea, S., Johnson, R. J., & Palmieri, P. A. (2007). Refining our understanding of traumatic growth in the face of terrorism: Moving from meaning

cognitions to doing what is meaningful. *Applied Psychology: An International Review*, 56, 345-366.

- Hall, B. J., Hobfoll, S. E., Palmieri, P. A., Canetti-Nisim, D., Shapira, O., Johnson, R. J., & Galea, S. (2008). The psychological impact of impending forced settler disengagement in Gaza: Trauma and posttraumatic growth. *Journal of Traumatic Stress*, 21, 22-29.

### **Is Post-Traumatic Growth Associated with Well-Being**

Is adversarial growth related to better or improved psychological functioning and physical health?

Given that people often report positive benefits in the aftermath of adversity, it seems reasonable to predict that such growth would result in positive psychological and health outcomes. However, the evidence for this prediction has been mixed and inconclusive with positive, negative, and null results all reported in the literature. That is, there is some disagreement in the scientific community about whether experiencing adversarial growth is associated with better well-being.

To provide a more comprehensive understanding of the relationship between self-reported adversarial growth, psychological and physical health, Helgeson and her colleagues (2006) conducted a meta-analytic review of 87 articles on this topic. A meta-analysis is a statistical method that combines all existing studies on a topic to determine whether the relationship holds when all independent studies are combined. In other words, a meta-analysis provides a precise estimate of the strength of a relationship between the variables of interest across multiple independent studies.

The meta-analysis revealed that adversarial growth was related to

- Less depression
- Greater positive well-being
- More intrusive and avoidant thoughts about the stressor

The relationship between growth and well-being, and between growth and decreased depression, was stronger after about two years had passed since the adverse event. However, the meta-analysis revealed that adversarial growth was unrelated to

- Anxiety
- Global distress including measures of negative affect and mood
- Subjective reports of physical health
- Quality of life including aspects of physical and mental health

It seems contradictory that adversarial growth would be associated with intrusive and avoidant thoughts, but many researchers have considered these processes to be reflective of cognitive attempts to try and make sense of the event. Considered in this context the finding appears less consistent with negative outcomes of mental health and more compatible with the process of adversarial growth.

While these findings represent one of the first systematic reviews of the topic, it is important to note that these findings are not without limitations. Although adversarial growth was related to less depression and greater positive well-being, the magnitude of these effects were relatively small. The analysis was based on cross-sectional data, meaning that no causal claims about the relationship can be made. For example, it is unclear whether adversarial growth causes positive well-being, whether it is positive well-being that is causing people to report adversarial growth, or whether increases in both adversarial growth and positive well-being are caused by a third unknown factor such as an individual's personal coping style. This important question can only be addressed with longitudinal studies that collect information from participants at several different points over time; a sentiment that is shared by many researchers in the field.

### **Key references**

1. Helgeson, V.S., Reynolds, K.A., & Tomich, P.L. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology*, 74, 797-816.
2. Tennen, H., & Affleck, G. (2008). Assessing positive life change: in search of meticulous methods. In C. Park., S. C. Lechner., M. H. Antoni., A.L Stanton. (Eds). *Medical illness and positive life change: Can crisis lead to personal transformation?* (pp. 31-49). Washington D.C. American Psychological Association.

### **What facilitates Post-Traumatic Growth?**

What are the factors that enhance the perception of adversarial growth? Many scientists have claimed that specific characteristics of the person, social environment, and the event may influence the level of adversarial growth reported by an individual.

A recent meta-analytic review of the topic by Prati and Pietrantonio (2009) has provided a more comprehensive understanding of some of the important factors associated with greater self-reported levels of adversarial growth.

The meta-analysis revealed that adversarial growth was strongly related to

- Positive reappraisal – a coping style that involves focusing on the positive aspects of what has happened or is happening.
- Religious coping – turning to religion for support and guidance during and after a stressful event. Additionally, adversarial growth was also moderately related to
- Seeking social support from other people during and after the stressful event
- Optimism
- Spirituality

Again, while this article provides a systematic review of the current evidence it is not without limitations. Most importantly, given the lack of prospective research in the field one needs to remain cautious and avoid drawing causal conclusions from this review. Most of these studies consist of cross-sectional data, meaning that no causal claims about the relationship can be made. For example, it is unclear whether adversarial growth causes increases in optimism, whether it is optimism that is causing people to report adversarial growth, or whether increases in both

adversarial growth and positive well-being are caused by a third unknown factor such as well-being. With that said, the review does improve scientists' understanding on the specific conditions in which adversarial growth is more likely to be reported.

**Key reference**

1. Prati, G. & Pietrantonio, L. (2009). Optimism, social support, and coping strategies as factors contributing to posttraumatic growth: A meta-analysis. *Journal of Loss and Trauma*, 14, 364-388.

(Note: This information was adapted from [www.growthinitiative.org](http://www.growthinitiative.org), a website providing information on post-traumatic growth supported by grant #24322 from the John Templeton Foundation awarded to Jayawickreme.)