### What doesn't kill us...

Stephen Joseph discusses the psychology of post-traumatic growth

The field of psychological trauma is changing as researchers recognise that adversity does not always lead to a damaged and dysfunctional life. Post-traumatic growth refers to how adversity can be a springboard to higher levels of psychological well-being. This article provides an overview of theory, practice and research. To what extent is post-traumatic stress the engine of post-traumatic growth? How can clinicians measure change? What can help people to thrive following adversity?

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Is post-traumatic growth a normal and natural process?

What factors may impede post-traumatic growth?

Do we have to experience trauma in order to grow psychologically?

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Joseph, S. (2012). What doesn't kill us: The new psychology of posttraumatic growth. London: Piatkus Little Brown. Stephen Joseph's blog at Psychology

Today: www.psychologytoday.com/blog/whatdoesnt-kill-us

Interviews with Stephen Joseph about post-traumatic growth: http://whatdoesntkillus.com/?p=3

APA website: The road to resilience www.apa.org/helpcenter/roadresilience.aspx Suffering is universal: you attempt to subvert it so that it does not have a destructive, negative effect. You turn it around so that it becomes a creative, positive force.

Terry Waite, who survived four years as a hostage in solitary confinement (quoted in Joseph, 2012, p.143)

cientific interest in positive changes following adversity was sparked when a handful of studies appeared in the late 1980s and early 1990s, reporting positive changes in, for example, rape survivors, male cardiac patients, bereaved adults, survivors of shipping disaster, and combat veterans. Then, the topic of post-traumatic stress disorder (PTSD) was relatively new (following its introduction in 1980 by American Psychiatric Association), and was attracting much research interest. The relatively few observations of positive change were overshadowed by research on the ways in which trauma could lead to the destruction and devastation of a person's life.

But interest in how trauma can be a catalyst for positive changes began to take hold during the mid 1990s when the concept of post-traumatic growth (Tedeschi & Calhoun, 1996) was introduced. It proved to be popular and became the descriptor for a field of inquiry attracting international attention from researchers, scholars and practitioners (see, Calhoun & Tedeschi, 2006; Joseph & Linley, 2008a; Weiss & Berger, 2010). Over the past decade it has developed into one of the flagship topics for positive psychology

(Seligman, 2011). This article aims to provide a state-of-the-art review of the psychology of post-traumatic growth.

### What is post-traumatic growth?

After experiencing a traumatic event, people often report three ways in which their psychological functioning increases:

- Relationships are enhanced in some way. For example, people describe that they come to value their friends and family more, feel an increased sense of compassion for others and a longing for more intimate relationships.
- People change their views of themselves. For example, developing in wisdom, personal strength and gratitude, perhaps coupled with a greater acceptance of their vulnerabilities and limitations.
- People describe changes in their life philosophy. For example, finding a fresh appreciation for each new day and re-evaluating their understanding of what really matters in life, becoming less materialistic and more able to live in the present.

Several self-report psychometric tools were published during the 1990s to assess positive changes following trauma, the first such measure was the Changes in Outlook Questionnaire (Joseph et al., 1993), followed by the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996); the Stress Related Growth Scale (Park et al., 1996), the Perceived Benefit Scale (McMillen & Fisher, 1998), and the Thriving Scale (Abraido-Lanza et al., 1998). Each of these measures asks respondents to think about how they have changed since an event and to rate the extent of their change on a series of items.

Using such measures of perceived growth, and open-ended interviews, a large number of studies have shown that growth is common for survivors of various traumatic events, including transportation accidents (shipping disasters, plane crashes, car accidents), natural disasters

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Joseph, S. (2012). What doesn't kill us:

(hurricanes, earthquakes), interpersonal experiences (combat, rape, sexual assault, child abuse), medical problems (cancer, heart attack, brain injury, spinal cord injury, HIV/AIDS, leukaemia, rheumatoid arthritis, multiple sclerosis) and other life experiences (relationship breakdown, parental divorce, bereavement, emigration). Typically 30–70 per cent of survivors will say that they have experienced positive changes of one form or another (Linley & Joseph, 2004).

Practitioners in health, clinical and counselling psychology will encounter patients daily whose lives have been affected by such events. Up to now practitioners may have drawn on theories of post-traumatic stress to help their patients. A pressing theoretical issue therefore is the relation between post-traumatic stress and post-traumatic growth. How can these new ideas improve how we work with patients?

## Theory and practice of post-traumatic growth

Research is now untangling a seemingly intricate dance between post-traumatic stress processes and post-traumatic growth. The most successful attempt to date is organismic valuing theory, which

explains how posttraumatic growth arises as a result of post-traumatic stress. This is a personcentred theory that draws together information processing and social cognitive theories of posttraumatic stress with research on selfdetermination theory. The theory shows trauma leads to a breakdown in selfstructure, signalled by the experiences of posttraumatic stress indicating the need to cognitively process the new traumarelated information. People are intrinsically

motivated towards processing the new trauma-related information in ways that maximise their psychological well-being (Joseph & Linley, 2005, 2006).

Organismic valuing refers to how intrinsic motivation is experienced by the person. One woman who was caught up in a fatal shooting in which her close friend was killed, and who had suffered from considerable post-traumatic stress for several years, said how she woke early one morning after a night of restless sleep and got up to look at a picture of her children:

In the silent wee hours of the morning, I sat staring at their picture and began to sob. Through my sobs, I heard the real voice of wisdom I believe we all possess. It was my voice, the voice that knows me best, but a voice that had become muted. Guess what. No one is coming to change the situation. No one will rescue you. No one can. It's up to you. Find your strength. I realised that as long as I remained a victim, I too made my family a victim. My anxiety could only teach them to be anxious. I was robbing them of happiness and a positive outlook on the world. I had come to the intersection of intersections. I could choose to end my life or I could choose to live.



Post-traumatic growth – people describe that they come to value their friends and family more

I needed to live for my family – and later I understood most importantly, for myself. (quoted in Joseph, 2012, p.142)

Post-traumatic growth involves the rebuilding of the shattered assumptive world. This can be illustrated through the metaphor of the shattered vase. Imagine that one day you accidentally knock a treasured vase off its perch. It smashes into tiny pieces. What do you do? Do you try to put the vase back together as it was? Do you collect the pieces and drop them in the rubbish, as the vase is a total loss? Or do you pick up the beautiful coloured pieces and use them to make something new - such as a colourful mosaic? When adversity strikes, people often feel that at least some part of them be it their views of the world, their sense of themselves, their relationships - has been smashed. Those who try to put their lives back together exactly as they were remain fractured and vulnerable. But those who accept the breakage and build themselves anew become more resilient and open to new ways of living.

These changes do not necessarily mean that the person will be entirely free of the memories of what has happened to them, the grief they experience or other forms of distress, but that they live their lives more meaningfully in the light of what happened.

The implication of organismic valuing theory is that post-traumatic stress is the catalyst for post-traumatic growth. Helgeson et al. (2006) conducted a meta-analytic review concluding that greater post-traumatic growth was related to more intrusive and avoidant post-traumatic stress experiences. As intrusion and avoidance are generally seen as symptoms of PTSD at first glance this result would seem to suggest that post-traumatic growth is indicative of poor mental health, but consistent with organismic valuing theory Helgeson et al. suggest is that these constructs reflect cognitive processing:

Experiencing intrusive thoughts about a stressor may be a signal that people

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Kunst, M.J.J. (2010). Peritraumatic distress, posttraumatic stress disorder symptoms, and posttraumatic growth in victims of are working through the implications of the stressor for their lives, and these implications could lead to growth. In fact, some might argue that a period of contemplation and consideration of the stressor is necessary for growth to occur. (p.810)

It is in this sense that post-traumatic stress can be conceptualised as the engine of post-traumatic growth. This is also the conclusion of a recent study by Dekel and colleagues (2012), who set out to shed light on the interplay between PTSD and post-traumatic growth. Using longitudinal self-report data from Israeli combat veterans who were studied over 17 years, with assessment at three time points, the researchers found that greater PTSD in 1991 predicted greater growth in 2003, and greater PTSD in 2003 predicted greater growth in 2008.

However, it also seems that the relationship between post-traumatic growth and post-traumatic stress is a function of the intensity of post-traumatic

stress. Butler et al. (2005), for example, in their study following the attacks of September 2001, found that greater post-traumatic stress was associated with greater post-traumatic growth, but only up to a point, above which post-traumatic growth declines.

Could there be a curvilinear relationship between posttraumatic stress and post-traumatic growth? Low levels of post-traumatic

stress reactions indicate that the person has been minimally affected, thus one would

expect minimal post-traumatic growth. A moderate level of posttraumatic stress is indicative that the individual's assumptive world has in some way been challenged triggering the intrusive and avoidant experiences, but the person remains able to cope, think clearly, and engage sufficiently in the necessary affective-cognitive processing needed to work through. A high level of post-traumatic stress, however, where a diagnosis of PTSD might be considered, is likely to mean that the person's coping ability is undermined and their ability to affectivelycognitively process and work through their experience is impeded. The inverted U-shape relationship between post-traumatic stress and post-traumatic growth has been reported in several studies (e.g. Kunst, 2010)

Thus, through the above research and theory we are



Post-traumatic stress can be conceptualised as the engine of post-traumatic growth

developing a new understanding of psychological trauma that integrates posttraumatic stress and post-traumatic growth within a single conceptual framework which can guide clinical practice. A new constructive narrative framework that can guide practitioners is the THRIVE model (Joseph, 2012). THRIVE consists of six signposts (see box). Starting with 'taking stock', the therapist works with the client to alleviate problems of post-traumatic stress sufficiently so as to enable them to engage in effortful cognitive processing. Then follows five further signposts in which the therapist can work alongside the client. Post-traumatic growth provides practitioners with a new set of tools in their armoury for working with traumatised patients.

#### **New directions**

Each of the measures mentioned above provides a particular operational definition of the construct, and they tend to be only moderately inter-correlated. Unlike, for example, the construct of post-traumatic stress disorder, which has

### **THRIVE**

Taking stock (Making sure the client is safe and helping them learn to manage their post-traumatic stress to tolerable levels, e.g. through exposurerelated exercises).

Harvesting hope (Learning to be hopeful about the future, e.g. looking for inspirational stories of people who have overcome similar obstacles).

Re-authoring (Storytelling, e.g. using expressive writing techniques to find new perspectives).

Identifying change (Noticing post-traumatic growth, e.g. using the Psychological Well-Being Post-Traumatic Changes Questionnaire to track change).

**V**aluing change (Developing awareness of new priorities, e.g. positive psychology gratitude exercise).

Expressing change in action (Actively seeking to put post-traumatic growth into the external world, e.g. making a plan of activity for following week that involves doing concrete things).

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an agreed definition provided by DSM around which measurement tools can be developed, there is no gold standard definition of posttraumatic growth. One suggestion arising from organismic valuing theory is to reframe post-traumatic growth as an increase in psychological well-being (PWB) as opposed to subjective well-being (SWB) (Joseph & Linley, 2008b). Traditionally, the focus of clinical psychology has been on SWB, which can be broadly defined as emotional states. Clinical psychology has been

largely concerned with the alleviation of negative emotional states. With positive psychology in the background, clinical psychologists are now also concerned with the facilitation of positive emotional states. But post-traumatic growth does not refer to a positive emotional state but to an increase in PWB, defined as high levels of autonomy, environmental mastery, positive relations with others, openness to personal growth, purpose in life and self-acceptance (see box).

The topic of post-traumatic growth has also attracted interest from quantitative researchers in personality and social psychology. People may say they have grown, but have they really? There is a limitation to the above-mentioned measures, which is that they rely on retrospective accounts of change - that is, asking people to report on what positive changes they perceive themselves to have experienced since an event. We might refer to this as perceptions of growth to distinguish from actual growth, as measured by calculating the difference between state measures of psychological well-being before and after trauma.

Research suggests that the strength of association between actual and perceived growth is moderated by the degree of distress: for those who are most distressed

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there is a weaker correlation, but for those who are less distressed there is a moderate association (Gunty et al., 2011). It may be that perceptions of growth are at times illusory and a way of coping with distress (Zoellner & Maercker, 2006). Therefore researchers do need to be wary of always taking reports of growth at face value, particularly in the immediate aftermath of a crisis when people are most distressed.

However, while we may question people's perceptions of growth, there is no question that actual post-traumatic growth occurs, as this has been demonstrated in before-andafter studies (e.g. Peterson & Seligman, 2003). What is now needed are more prospective longitudinal studies able to document the development of growth over time, how both actual and perceived growth covary over time and how they relate to other variables - both as outcome variables in order to

understand the development of growth, and as predictor variables in order to understand the consequences of growth. Research shows that greater post-traumatic growth is associated with: personality factors, such as emotional stability, extraversion, openness to experience, optimism and self-esteem; ways of coping, such as acceptance, positive reframing, seeking social support, turning to religion, problem solving; and social support factors (Prati & Pietrantoni, 2009). But now more sophisticated theoretically informed designs are also called for in which we can begin to understand the factors that mediate and moderate post-traumatic stress and thus lead to post-traumatic growth.

As an example of the directions that social and personality researchers may pursue, in one recent study it was found that emotion-focused coping mediated the association between subjective ratings of distress and post-traumatic growth and that emotional intelligence moderated the association between emotion-focused coping and post-traumatic growth (Linley et al., 2011). While there is much that can be learned from quantitative research, there is also a need for qualitative research to explore new contexts (e.g. Splevins et al.,

# Assessing growth

Think of how you yourself have been influenced by events in your own life. The Psychological Well-Being Post-Traumatic Changes Questionnaire (PWB-PTCQ) was developed to assess post-traumatic growth as defined by an increase in PWB. The PWB-PTCQ is an 18-item self-report tool in which people rate how much they have changed as a result of the trauma. A short six-item version is shown below.

Read each statement below and rate how you have changed as a result of the trauma.

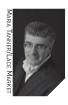
- 5 = Much more so now
- 4 = A bit more so now
- 3 = I feel the same about this as before
- 2 = A bit less so now
- 1 = Much less so now
- 1. I like myself
- . I have confidence in my opinions
- 3. I have a sense of purpose in life
- 4. I have strong and close relationships in my life
- 5. I feel I am in control of my life
- 6. I am open to new experiences that challenge me

People may find it useful to use the PWB-PTCQ to gain insight into how they have changed. Often these dimensions of change go unnoticed in everyday life but deserve to be flagged up and nurtured. Clinicians will find the new tool useful as it allows them to bridge their traditional concerns of psychological suffering with the new positive psychology of growth following adversity (see Joseph et al., 2012).

2011) and interventions (e.g. Hefferon et al., 2008).

#### Conclusion

The idea of post-traumatic growth has become one of the most exciting topics in modern psychology because it changes how we think about psychological trauma. Psychologists are beginning to realise that post-traumatic stress following trauma is not always a sign of disorder. Instead, post-traumatic stress can signal that the person is going through a normal and natural emotional struggle to rebuild their lives and make sense of what has befallen them. Sadly it often takes a tragic event in our lives before we make such changes. Survivors have much to teach those of us who haven't experienced such traumas about how to live.



Stephen Joseph is a Professor at the University of Nottingham and Honorary Consultant in Nottinghamshire NHS Trust stephen.joseph@ nottingham.ac.uk