

Posttraumatic Growth and Resilience to Trauma: Different Sides of the Same Coin or Different Coins?

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Posttraumatic growth (PTG) is an appealing but poorly understood construct. Hobfoll, Hall, Canetti-Nisim, Galea, Johnson, and Palmieri's (2007) insightful paper highlights important weaknesses in existing theory and data. Although we commend Hobfoll et al. for offering a provocative new way to conceptualise PTG in terms of action-focused growth, we also find a number of limitations in their approach. In this article, we attempt to place PTG within a broader framework of individual differences in response to potential trauma. As in most of the literature on PTG, Hobfoll et al. implicitly equate growth with resilience or view it as superior to resilient outcomes. We argue, however, that many if not most people are resilient in the face of trauma and that resilient outcomes typically provide little need or opportunity for PTG. We close by exploring the literature on resilience for possible mechanisms underlying a link between PTG and adaptation. For example, Hobfoll et al. dismiss some forms of reported growth as illusory. In contrast, we review evidence for the adaptive value of self-enhancing illusions in coping with adversity.

Le développement post-traumatique (PTG) est un concept attrayant mais insuffisamment approfondi. L'article stimulant de Hobfoll & al. met en relief des carences significatives dans les données et théories existantes. Bien que nous approuvions Hobfoll & al. quand ils présentent une conception aussi nouvelle que provocante du PTG en terme de développement centré sur l'action, nous estimons aussi que cette approche a ses limites. On essaie, dans cet article, de replacer le PTG dans le cadre plus vaste des différences individuelles en réponse au traumatisme potentiel. Comme souvent dans la littérature sur le PTG, Hobfoll & al. assimilent le développement à la résilience ou le considèrent comme supérieur aux conséquences de la résilience. Nous défendons au contraire l'idée que beaucoup de gens, voire la plupart, sont résilients face au traumatisme et que les apports de la résilience peuvent se passer ou n'offrent habituellement que peu d'opportunités au PTG. On termine en examinant la littérature sur la résilience à la recherche d'éventuels processus sous-tendant un lien entre PTG et adaptation. Par exemple, Hobfoll

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& al. rejettent certains témoignages de développement comme relevant de l'illusion; nous avons par contre relevé des preuves que des illusions valorisant le moi contribuent à l'adaptation dans la lutte contre l'adversité.

That the horror of psychological trauma might have a silver lining; that people might benefit from the experience or even grow toward more optimal functioning is an intriguing and appealing notion. Posttraumatic growth is an intriguing construct because it suggests potentially new angles from which to examine psychological trauma. It is appealing because the prospect of PTG conveys hope amidst the increasing threat of global terrorism and man-made catastrophes. Another attraction of the PTG construct is that it seems to provide a way to integrate the shadowy study of trauma with the growing trend in psychology and the social sciences toward more positive aspects of human nature.

Beyond these gratifying but transitory gains, however, we must ask if there is anything truly substantial to the construct. When we slip PTG under the microscope of full scientific scrutiny, what will we find? It is here that Hobfoll et al. (2007) perform a great service. Their thoughtful and provocative review asks big and important questions. They highlight important weaknesses of existing theory and data in a thoughtful and precise manner and present their own rich set of findings, gleaned from an impressive data set. In striking contrast to the vast majority of PTG studies that have relied on cross-sectional data and retrospective accounts, Hobfoll and colleagues examined PTG in a large, prospective sample, at multiple time points, and in relation to a wide array of other measures. Not only did their findings fail to support the salutogenic nature of PTG, at least as it has been measured in the literature, they also provided compelling evidence that PTG in the context of terrorism may be associated with a number of untoward consequences, such as the promotion of violence and ethnocentrism.

As much as we might praise Hobfoll et al.'s efforts, however, there remain a number of crucial problems with the PTG concept that were not highlighted in their review. It is these problems that we focus on in this article. We begin with a brief review of the strengths and limitations of Hobfoll et al.'s primary thesis. Then we consider our own conception of individual differences in response to potential trauma and attempt to understand PTG from within that broader framework.

POSTTRAUMATIC GROWTH AS MEANINGFUL ACTION

Undoubtedly, some will argue that questioning the adaptive benefits of PTG detracts from the admirable courage and persistence exhibited by many people in the face of nearly debilitating trauma. But Hobfoll et al.'s critical position is timely. Recent meta-analytic reviews have highlighted glaring

inconsistencies in the empirical findings relating PTG and adjustment (e.g. Zoellner & Maercker, 2006; Helgeson, Reynolds, & Tomich, 2006). And because most of the available research on PTG is based on retrospective self-reports obtained using cross-sectional designs, it is unclear whether self-reported PTG reflects actual life changes or simply retrospective reattribution for the pain experienced during the recovery process (“I am better now, so I must have grown”) (Bonnano, 2005, p. 267). Several researchers have also found that self-reported change attributed to stressful events often involves derogation of past selves rather than actual life changes, which suggests that PTG may reflect self-protective and self-enhancing processes (McFarland & Alvaro, 2000; see also Wilson & Ross, 2001). Indeed, one of the few studies that assessed the validity of perceived stress-related growth using multiple methodologies found that endorsement of growth on specific subscales of the PTGI was unrelated to actual changes reported in corresponding areas of life (Frazier & Kaler, 2006). For example, people who reported an increase in empathy attributed to the stressor did not in fact turn out to be more likely to serve as volunteers helping other people who had undergone similar experiences or demonstrate willingness to help others in the future (Frazier & Kaler, 2006).

What is refreshingly new in Hobfoll et al.’s argument is their position that PTG may actually be a genuine “marker of positive adaptation” but only “when accompanied by actions, not solely cognitive maneuvers” (p. 359). This shift in focus provides a welcome change from the overvaluation of cognitive processing and “working through” of stressful events that has dominated the trauma literature (Bonanno & Kaltman, 1999). The idea that helping others is what bestows beneficial meaning on people’s traumatic experience has strong intuitive appeal and also fits with the well-documented link between social support and adjustment (e.g. Coyne & Downey, 1991). Measures of individuals’ social engagement and support networks reflect social functioning over time and thus may be more reliable indicators of adjustment than self-reports about growth that were obtained at specific points in time. Unfortunately, Hobfoll et al. do not provide much detail on the specific behaviors and processes that might transform PTG into a veridical and protective phenomenon. Considering the collective arm-in-arm resistance among Israeli settlers as a model for action-focused growth appears to us somewhat of a stretch, especially in the absence of objective measures of social cohesiveness. However, we suspect that future research may yet confirm their position.

RESILIENT OUTCOMES PROVIDE LITTLE NEED OR OPPORTUNITY FOR POSTTRAUMATIC GROWTH

A far more important limitation in Hobfoll et al.’s approach is that they fail to consider the possibility that there are many people who do not need to

“reconstitute their relations to others” (p. 349) or experience action-focused growth following trauma, but rather continue to be able to fulfill personal and interpersonal demands even in the face of considerable adversity. All conceptions of PTG, including Hobfoll et al.’s, presuppose a certain level of life threat and existential struggle; otherwise growth as an outcome is not possible (Tedeschi & Calhoun, 2004). However, it is crucial to note, as a growing number of prospective studies have now demonstrated, that many and often the majority of people exposed to potentially traumatic events exhibit a stable trajectory of healthy functioning, or resilience, in both personal and interpersonal spheres across time (e.g. Bonanno, Wortman, Lehman, Tweed, Haring, Sonnega, Carr, & Nesse, 2002; Bonanno, Galea, Bucciarelli, & Vlahov, 2006; Bonanno, Moskowitz, Papa, & Folkman, 2005; Bonanno, Rennieke, & Dekel, 2005; Deshields, Tibbs, Fan, & Taylor, 2006).

A notable problem with many PTG studies, including Hobfoll et al. (2007), is that their authors tend to implicitly or explicitly equate PTG with resilience or even consider PTG superior to resilient outcomes. Researchers have used a variety of terms to describe PTG, including “perceived benefits”, “benefit-finding”, “thriving”, “posttraumatic growth”, and “positive life change”. Although Hobfoll et al. question the validity of existing PTG measures given people’s limited ability to accurately report on actual life changes, they seem to uphold the notion that PTG, when combined with action, represents the most desired outcome of traumatic experiences.

Unfortunately, the vast majority of studies on PTG have also failed to address this issue, primarily due to their exclusive reliance on cross-sectional designs that preclude distinctions among outcome pathways. An interesting exception is a recent study by Lechner, Carver, Antoni, Weaver, and Phillips (2006) on benefit finding in women with breast cancer. They identified a group of cancer survivors with low distress and high levels of well-being who reported relatively little benefit from the experience. According to the authors, these women appeared to do less “psychological work” regarding their experience of breast cancer. Specifically, they did less reframing and were less likely to examine their feelings and to engage in religious coping. Lechner et al. (2006) cautioned, however, that many of the findings concerning this group were ephemeral, did not replicate across samples or analyses within a sample, and presented the smallest group in each sample. Moreover, most of these women had less advanced cancer and few had received chemotherapy. As a consequence, these women may have experienced less distress and engaged in less benefit-finding primarily because they had a less severe medical prognosis.

We would argue, however, that it is highly unlikely that resilient individuals would engage in the kind of meaning-making behaviors associated with PTG for the simple reason that they tend not to struggle to the same extent as might other, more traumatised individuals. Although resilient individuals

may experience short-term dysregulation and variability in their emotional and physical well-being (Ong, Bisconti, Bergman, & Wallace, 2006; Carver, 1998), their reactions to a potential traumatic event tend to be relatively brief and usually do not impede their functioning to a significant degree. Consistent with this view, a number of studies have now demonstrated that people exhibiting a resilient outcome trajectory are significantly less likely to search for meaning following loss (Bonanno, Wortman, & Nesse, 2004; Davis, Nolen-Hoeksema, & Larson, 1998) or potential trauma (Rennicke & Bonanno, 2006) compared to others exposed to the same event.

It is also important to distinguish resilient outcomes from the more prototypical trajectory of recovery from trauma, a pathway characterised by observable elevations in psychological symptoms coupled with relatively poor functioning that endures for at least several months before gradually returning to baseline, pre-trauma levels (Bonanno, 2004). We believe that these individuals, who after exposure to potential trauma exhibit the classic recovery trajectory, are most likely to experience and to report PTG (Bonanno, 2005).

EXTENDING LESSONS FROM THE STUDY OF RESILIENCE TO POSTTRAUMATIC GROWTH

A key advantage of the study of resilient outcomes, contrasted with the more traditional focus on psychopathological reactions to trauma, is that it illuminates the many and sometimes unexpected means by which people might successfully mitigate the disruptive aspects of adverse events (Bonanno, 2004). Although we have argued here that resilient outcomes in all likelihood involve little need or opportunity for PTG, we can nonetheless still apply this same principle, that is, we can examine how various avenues from the study of resilience might help illuminate the role PTG plays in adaptation to trauma. In the remainder of this article, we review two such avenues: the potential salutary influence of self-serving biases and the importance of flexibility in coping and emotion regulatory processes.

Pragmatic Coping or “Coping Ugly”

Hobfoll et al.’s generalisation that PTG combined with action produces positive outcomes, and that PTG without action represents a shallow and dysfunctional illusion, unnecessarily narrows our understanding of the adaptive process. Moreover, the assumption that any self-serving or self-enhancing aspects of PTG would be harmful is actually contradicted by most of the available empirical data. Research has shown that “positive illusions” may help people to successfully adjust to threatening events such as receiving a diagnosis of breast cancer (e.g. Taylor, Wood, & Lichtman,

1984) and that self-serving biases present a necessary feature of psychological adjustment and healthy coping, particularly in the context of extreme adversity (Taylor & Brown, 1988). Taylor's (1983) theory of cognitive adaptations suggests that self-enhancing biases can buffer current threats and possible future setbacks by helping to restore self-esteem, develop an optimistic outlook, and regain a sense of mastery over the event. Hence, even if PTG reflects nothing more than self-enhancing illusions of change, as some have argued (e.g. Davis & McKearney, 2003; McFarland & Alvaro, 2000), it may in fact be one of the mechanisms that under particularly aversive circumstances contribute to adaptive outcomes.

Elsewhere, we have catalogued self-enhancing biases among a broader category of coping behaviors, which we referred to as *pragmatic coping*. As a group, these behaviors have in common that they tend to be associated with at least some maladaptive characteristics in normal circumstances, but may also be uniquely adaptive following exposure to relatively transient but potentially traumatic life events (Bonanno, 2004, 2005; Westphal, Bonanno, & Bartone, in press). Because these behaviors are often associated with clear costs as well as benefits, and in the balance represent far from perfectly healthy orientations, we have also referred to this category as "coping ugly" (Bonanno, 2006). A number of studies have shown that at least some resilient individuals can be characterised as using these types of pragmatic or ugly coping behaviors (e.g. Bonanno, Keltner, Holen, & Horowitz, 1995; Bonanno, Rennie, & Dekel, 2005).

Of particular relevance to our concerns in this article, pragmatic coping strategies, such as self-enhancing biases, are often associated with longer-term social liabilities. For example, self-enhancers have been found to score high on measures of narcissism and tend to evoke negative impressions in others (John & Robins, 1994). Dismissing self-enhancers as dysfunctional, however, obscures the coping advantage these individuals appear to hold when they are confronted with events that present a significant threat to the self.

But positive adaptation and social liabilities are not necessarily mutually exclusive. In a recent set of studies involving bereaved individuals in the US facing violent loss and Bosnian civilians in the immediate aftermath of the Balkan civil war, self-enhancers were rated by mental health professionals as better adjusted (Bonanno, Field, Kovacevic, & Kaltman, 2002). What is more, among bereaved participants, the adaptive benefits of self-enhancement were most pronounced for those who had suffered the most severe and violent losses, suggesting that self-enhancement may have played a buffering role. It is noteworthy, however, that although bereaved self-enhancers exhibited better adjustment, they were nonetheless rated relatively unfavorably by untrained observers who had viewed them on videotapes.

Similarly, Bonanno, Rennie, and Dekel (2005) recently found that self-enhancers among high-exposure survivors of the 11 September attack in

New York City were most likely to exhibit a resilient outcome, regardless of whether resilience was defined by participants' self-reports of their own psychological adjustment or by ratings of their adjustment obtained anonymously from their close friends and relatives. Again, however, self-enhancement in this study was also associated with social liabilities. At the 18-month point, self-enhancers' friends/relatives rated them as declining in social adjustment.

Hobfoll et al. (2007) also noted the latter finding and mistakenly cited it as supportive of their thesis; "So in this way, PTG may serve the role of a cognitive coping strategy following extreme stress, but not translate to actual change in positive posttraumatic functioning" (p. 361). This is a misinterpretation of the data; the bulk of the data from this study do in fact show that self-enhancement translated into actual positive adjustment. Self-enhancers were more likely than other participants to experience positive affect when discussing the events of 9/11. Moreover, although self-enhancers did receive unfavorable ratings of social adjustment, their friends/relatives nonetheless rated them as better adjusted normally in comparison to other participants in four out of five domains, and did not perceive them as declining in adjustment in these domains over time despite having had high levels of exposure during the September 11th attack. Perhaps even more interesting, self-enhancers perceived their social relationships in relatively more positive terms than did other participants, and this factor fully mediated their reduced PTSD symptoms. In other words, self-enhancers appear to be blissfully unaware of the critical reactions they may evoke in others, and this self-serving bias in social perception seems to play the crucial role in their ability to maintain healthy function in other areas.

Adaptive Flexibility

Another aspect of resilience that suggests interesting implications for recovery and growth is the capacity for behavioral elasticity or *adaptive flexibility* (Bonanno, 2005). Developmental psychologists have long argued for the importance of flexibility in adaptation to impinging developmental challenges (Block & Block, 1980). More recently, research with adults has pointed toward the salutary impact of flexibility in coping (Cheng, 2001) and emotion regulation (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004). Cheng (2001) noted, for example, that successful coping is not defined by one's choice of specific coping strategies, but the critical element is flexible application of coping strategies that match the nature of the stressor. Similarly, Bonanno, Papa et al. (2004) argued that whether one expresses or suppresses emotional expression is not as important for adjustment as is the ability to flexibly express or suppress emotion as demanded by the situational context. In reviewing the role of personality factors in

adult resilience, Westphal et al. (in press) also recently noted the importance of flexibility in the ways people perceive and appraise highly aversive life events.

Individual differences such as dispositional optimism (Scheier & Carver, 1985), hardiness (Kobasa, Maddi, & Kahn, 1982), and ego resiliency (Block & Block, 1980) shape responses to potential trauma by influencing threat appraisal, emotion regulation, and ability to effectively elicit social support. For example, optimistic individuals share a belief in their ability to master stressful situations that in turn fosters active coping and helps maintain motivation and persistence after setbacks. Hardy individuals are able to recognise the possible benefits of a challenging situation as well as the reality of potential danger and loss. This ability to maintain a differentiated view of positive as well as negative information is thought to enable them to manage difficult life events in a flexible and effective manner. Appraisal-based flexibility promotes resilience because it fosters feelings of mastery, competence, commitment, and other aspects of positive self-perceptions that maintain or restore self-esteem after potentially threatening experiences.

Each of these processes suggests implications for PTG that both support and conflict with Hobfoll et al.'s analysis. On the one hand, consistent with Hobfoll et al., appraisal, coping, and emotion regulation processes that promote active engagement and meaningful action would help people protect and potentially enhance their sense of self-efficacy and self-esteem. These processes in turn would also likely foster the expression of positive emotion and produce mutually satisfying interactions with other people (Fredrickson, 2001; Keltner & Bonanno, 1997).

On the other hand, however, a key point that Hobfoll et al. fail to account for is that in many situations meaningful action may not be feasible or warranted. The common denominator of flexibility is the capacity to shape and modify one's behavior to meet the demands of a given stressor. In situations where active coping is counter-indicated, more internal, cognitive forms of coping and regulation may be advantageous. For example, when confronted with limited or no opportunities to redress past injustices or redeem irreparable loss, cognitive coping strategies such as benefit-finding, radical acceptance, or self-enhancing appraisal of events may provide a respite from negative emotions and protect from destabilising feelings of demoralisation and frustration that can result from forced inaction.

CONCLUDING REMARKS

Hobfoll et al.'s focus on active and socially embedded coping presents a step in the right direction in understanding the adaptive components in PTG and provides a welcome change from views that have overemphasised "working through" traumatic experiences. However, their analysis has important limitations, many of which stem from the failure to distinguish between PTG

and resilient outcomes. As other PTG researchers, Hobfoll et al. do not consider that resilient outcomes may provide little need or opportunity for posttraumatic growth. We also criticised Hobfoll et al.'s generalisation that PTG without action necessarily represents a shallow and dysfunctional illusion by reviewing evidence for the adaptive benefits of pragmatic or "ugly" coping. By portraying action-focused PTG as the optimal response to traumatic experiences, Hobfoll et al. perhaps inadvertently perpetuate the common but empirically unfounded assumption that PTG is superior to resilient outcomes.

In closing, we call for a broader understanding of the adaptive processes that may facilitate resilient outcomes. We argue that coping in response to potential trauma is best understood from within a broader framework of individual differences. Specifically, we consider flexibility in appraisal, coping, and emotion regulation processes to master the challenges posed by potentially traumatic events as more important to a resilient trajectory than reliance on any particular coping strategy. Just as risk factors for the development of PTSD vary across different types of potentially traumatic events, the multiple pathways to resilient outcomes undoubtedly vary in adaptive value across different people, situations, and cultural contexts (Bonanno, 2005; Westphal et al., in press). Failure to consider the costs and benefits of a broader range of dispositions and adaptive coping processes that include both "ugly" and socially desirable forms of coping such as action-based PTG unnecessarily limits our understanding of the full range of possible outcomes and responses to potential trauma.

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