

From Mindfulness to Meaning: Implications for the Theory of Posttraumatic Growth

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In their target article, Garland, Farb, Goldin, and Fredrickson (this issue) compile literature from various fields to present a compelling model detailing the mechanisms by which mindfulness may facilitate meaning-making and eudaimonic well-being. They do an excellent job of describing the impact of mindfulness on cognitive, emotional, and interoceptive processes that contribute to one's phenomenological experience. Given our interest in the processes by which growth and meaning emerge following trauma, we found their theory in this issue particularly intriguing. We have chosen to focus this commentary on the process of positive reappraisal central to Garland et al.'s model, which we feel is of particular relevance to existing theories of growth and meaning-making.

Posttraumatic Growth: A Brief Description

The experience of suffering is common, and most, if not all, individuals will experience a significant tragedy, loss, or trauma in their lifetime. Historically, the fields of psychology and psychiatry have focused on "fixing" the problems or deficits associated with highly stressful or traumatic experience. However, recent shifts within the academic and medical sphere have begun to encourage the incorporation of a positive psychological perspective, emphasizing the potential to perceive benefits and grow from negative experiences and traumatic exposure (Seligman & Csikszentmihalyi, 2000; Tedeschi & Calhoun, 1995; Tedeschi & Kilmer, 2005). This is not a novel concept and a vast history of academic and contemplative reflection has inspired contemporary empirical investigations into the experiences of individuals who not only recover from trauma but use their experiences as a pathway to further growth, development, and resiliency (Tedeschi, Park, & Calhoun, 1998).

Posttraumatic growth (PTG), or the positive psychological changes that may emerge following exposure to traumatic circumstances, can be understood to refer, broadly, to a cluster of benefits that result from a complex combination of cognitive, emotional, and social processes. PTG is assessed and represented by the five factors of the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996)—new

possibilities, personal strength, appreciation of life, spiritual/existential change, and relating to others—and the process of PTG is prompted by an initial disruption to one's assumptive world view and system of core beliefs.

Assumptive Worlds, Rumination, and Appraisal

Human beings appraise the significance of stressors as either challenging or threatening relative to the context of resource availability. As Janoff-Bulman (1992) described, traumatic experiences can be understood as those events that challenge an individual's previous assumptive worldviews and conceptions of predictability. In the past, we have used a metaphor of earthquakes to describe this process (Tedeschi & Calhoun, 1995, 2004). Similar to how an earthquake disrupts the physical environment, traumatic events have the capacity to disrupt, challenge, or even shatter an individual's assumptions or way of understanding the world (Janoff-Bulman, 1992). Therefore, the severity of a traumatic experience can be understood as the degree to which one's assumptive world is challenged. The more "seismic" an experience is, the more an individual is caused to question and develop their fundamental assumptions regarding safety, predictability, identity, and meaning (Tedeschi & Calhoun, 2004).

Disruptions to assumptive worlds are generally accompanied by a significant degree of psychological distress and initiate a series of cognitive processes by which one attempts to understand the event and rebuild the assumptive world (Cann et al., 2011). In the past, we have described these cognitive processes as ruminations and we believe that *deliberate* or *reflective rumination* allows for the *positive reappraisal* that Garland et al. (this issue) describe as crucial to the development of meaning and eudaimonic well-being. We emphasize that this *deliberate* or *reflective* form of rumination supersedes the *intrusive rumination* or *brooding* that has been associated with negative moods, anxiety, and depression often occurs in the immediate aftermath of trauma.

Intrusive ruminations are thoughts relating to events or experiences that appear in one's consciousness unexpectedly, whereas deliberate ruminations represent event-related thoughts that an individual

invites, welcomes, and engages in purposefully, often with the intent of trying to understand or make sense of events and their implications (Cann et al., 2011). We suggest that deliberate rumination is a more constructive version of the cognitive-emotional processing of trauma that usually occurs somewhat later in the course of rebuilding the assumptive world and structure of core beliefs. Further, whereas appraisal reflects the tendency to assess a given stressor relative to its context and resource availability, deliberate rumination reflects the ability to think in-depth or engage in repetitive thoughts with relation to psychological or emotional topics (Cann et al., 2011). Therefore, we might say that deliberate rumination is the cognitive process and positive reappraisal is the content of the cognitions. Deliberate rumination is an effortful strategy enacted with the intention of reconceptualizing (i.e., reappraising) highly stressful circumstances in such a way that meaning or growth become potential outcomes.

Our model of PTG suggests that following trauma and a corresponding disruption to one's core belief structure, both intrusive and deliberate rumination play distinct roles in the growth process. Intrusive thoughts, emotions, and physical sensations are an expected outcome of trauma and may represent an individual's initial attempt to make sense of their changing life circumstances. Evidence suggests that intrusive ruminations relating to trauma are positively associated with distress and a failure to cope (Cann et al., 2011). Alternately, deliberate or reflective ruminations have been positively associated with PTG, resolution, and meaning making in a wide variety of populations (Lindstrom, Cann, Calhoun, & Tedeschi, 2013; Triplett, Tedeschi, Cann, Calhoun, & Reeve, 2012). Of interest, higher levels of intrusive rumination have been shown to predict higher levels of deliberate rumination in what is believed to be the process of developing insight and bringing meaning to a traumatic experience (Calhoun, Cann, & Tedeschi, 2010; Cann et al., 2011). For many trauma survivors, the process of transforming intrusive ruminations to more deliberate or reflective ruminations directly relates to reports of growth, life satisfaction, and well-being (Cann et al., 2011). This process is by no means linear and the target article's emphasis on the *iterative* process of mindful reappraisal is key to the translation of ruminations from intrusive to deliberate via mechanisms of mindfulness, decentering, and positive reappraisal.

Rumination, Reappraisal, and Mindfulness

Garland et al. (this issue) provide an excellent description of how mindfulness contributes to processes of positive reappraisal and we believe that their theory accurately captures the shift from

intrusive to deliberate rumination presented in our model (Calhoun & Tedeschi, 2013). In essence, we understand this process to be similar to what can happen in exposure and cognitive processing therapy. In the immediate aftermath of a traumatic event, intrusive ruminations enter unwittingly into an individual's consciousness, causing activation of the stress response and possible experiences of anxiety, hypervigilance, dissociation, and so on. As Garland and colleagues note, the set-shifting feature of mindfulness allows individuals to practice direct engagement with their thoughts and feelings while observing the higher order functions of awareness and consciousness from a nonjudgmental and metacognitive perspective. Essentially, by consistently and mindfully attending to the thoughts or feelings induced by traumatic exposure, individuals engage in an iterative process whereby they are able to continually expose themselves to provocative sensations in a way that decreases the reaction intensity with time. Mindful attention to the cognitive, emotional, and interoceptive aftermath of traumatic experience allows one the opportunity, even if just for a moment, to step back and decenter from the experience, thus providing space for perspective taking and potential reappraisal processes.

In the past, we have suggested that a metacognitive stance, whereby one is able to observe the process of thoughts while directly engaging in the process of thinking, helps facilitate the dialectical (i.e., paradoxical) thought necessary for the development of PTG. This paradoxical thinking process allows trauma survivors to recognize that loss can produce gain. Although bad things do exist in the world, the world is not, necessarily, a fundamentally bad place. Through the mechanism of mindful reappraisal, trauma survivors are able to decenter and loosen their attachment with self-narratives in relation to thoughts and emotions. Individuals are able to assume a metacognitive vantage point that facilitates a move toward a position where a sense of gradual resolution can be incorporated into the altered life-narrative. We find that when individuals can articulate PTG, they sense that the trauma narrative is approaching completion and there can be resolution. The entire experience can then be seen as meaningful and the trauma survivor can proceed in living with a sense of eudaimonic well-being.

A Few Thoughts on the Five Factors of PTG

Previous research has indicated that the PTGI is a multidimensional measure, able to validly assess growth globally while also identifying specific subsets in which growth may be most prominent (Taku, Cann, Tedeschi, & Calhoun, 2008). Each of the five

PTG factors (i.e., Relating to Others, Personal Strength, Spiritual Change, New Possibilities, and Appreciation of Life) have been shown to relate somewhat differently to separate variables and outcomes. It is likely that the processes of mindfulness, decentering, and positive reappraisal discussed at length in Garland et al.'s (this issue) mindfulness-to-meaning theory play a key role in facilitating growth across the five PTG factors; however, the specific area of growth reported may be context dependent. For example, a victim of physical assault may, through the mechanisms of decentering and mindful reappraisal, come to report a greater sense of personal strength and new possibilities. Another person who witnessed a vehicle accident may, through similar mechanisms, report a greater appreciation for life and spiritual/existential change. Future research should consider how the separate dimensions of PTG are influenced by the cognitive and emotional mechanisms described in the target article and how the pattern of these relationships may differ among the five domains of the PTGI.

We emphasize that one should not expect outcomes of growth to occur in all of the domains identified, nor should one expect growth to occur within a certain time frame. As Garland et al. note, the immediacy with which these processes are initiated and enacted are individually variable and depend on a wide variety of developmental, social, and psychological variables. We encourage future research to consider how the five domains of PTG may facilitate or hinder engagement with the mechanisms of deliberate rumination and positive reappraisal detailed in the target article. In addition, previous work has suggested that the degree of trauma severity plays an important role in outcomes of growth. Mainly, our work suggests that a certain degree of trauma is necessary to initiate processes of intrusive and deliberate rumination in relation to embedded schemas and life-narratives; however, if the intensity of a traumatic experience surpasses a certain threshold, individuals are less likely to report outcomes of growth and more likely to report negative psychosocial consequences. Future work should consider how the severity of the trauma may influence one's engagement with the cognitive-emotional mechanisms detailed in the target article. Finally, we encourage future research to consider the longitudinal outcomes of the mindfulness-to-meaning theory. How long do the positive effects of decentering, mindful engagement, and reappraisal processes last? How does the social context in which the individual is embedded contribute to lasting outcomes? Is this a universal phenomenon, or are some individuals more likely than others to engage in the processes described? How do individual differences impact the efficacy of the proposed methods? How much mindfulness is needed to see a

change in well-being? These are important questions that warrant further examination, and we look forward to future work building upon the theory presented in the present issue.

A Few Final Words of Caution

We would like to close with a few cautionary words. Given that our interests center on the experience of growth stemming from extraordinary circumstances, we believe that the model proposed by Garland et al. (this issue) represents an important and testable contribution to the literature that will certainly inspire a new generation of clinicians and scholars to engage in the development of theoretically informed research studies and interventions. However, keeping this in mind we would like to point out that, in certain situations, mindfulness practice and intense cognitive engagement with thoughts, feelings, and emotions can lead to deleterious consequences, particularly in vulnerable individuals following traumatic exposure. We must be careful to be "expert companions" to those who are survivors of trauma so that we sensitively determine together with these persons when they are ready to take certain steps in the processes of deliberate rumination, consider reappraisals, and the possibilities of PTG. We describe this approach of expert companionship through the aftermath of trauma thoroughly elsewhere and believe it represents an important factor in helping trauma survivors avoid abnormally negative psychological consequences (Calhoun & Tedeschi, 2013).

Recent research has identified the potential for various negative psychological outcomes (i.e., dissociation, paranoia, anxiety, depression, and psychosis) to stem from the intense cognitive engagement sometimes associated with mindfulness practice (Compton, 2014). Individuals recovering from traumatic exposure are thought to be particularly vulnerable. The phrase "dark night of the soul," first described in 16th-century autobiographical literature written by St. John of the Cross, refers to spiritual or existential crisis with relation to one's union or sense of connection with God, a higher power, or overarching consciousness. References to these experiences of intense crisis and disconnection have appeared throughout history in virtually all religious and contemplative traditions and have been associated with a variety of negative psychosocial sequelae. In a recent interview with the *Atlantic* (Rocha, 2014), Buddhist scholar Shinzen Young noted,

Almost everyone who gets anywhere with [mindfulness] will pass through periods of negative emotion, confusion, [and] disorientation. . . . The same can happen in psychotherapy and other growth modalities. I would not refer to these types of

experiences as “dark night.” I would reserve the term for a somewhat rarer phenomenon. Within the Buddhist tradition, [this] is sometimes referred to as “falling into the Pit of the Void.” It entails an authentic and irreversible insight into Emptiness and No Self. Instead of being empowering and fulfilling . . . it turns into the opposite. In a sense, it’s Enlightenment’s Evil Twin.

We caution readers to recognize that although the target article provides a plausible mechanism by which mindfulness serves to mediate and facilitate the relationship between positive reappraisals and meaning-making, the presentation and engagement with mindfulness practice should be tailored to each individual’s unique psychological, emotional, and spiritual needs. Further, although the target article mentions that contemplative practice generally serves to facilitate mindfulness, we also feel it important to point out that current Western understanding of mindfulness practice appears to be largely informed by the Theravadin Buddhist tradition, a lineage that emphasizes mindful engagement in the goal of developing three primary types of insight: impermanence, suffering, and no-self. We would like to reemphasize Garland et al.’s (this issue) point that Buddhist meditation and mindfulness techniques are but one of a wide variety of contemplative methods. In working with individuals following a trauma, it is important to consider the cultural background with which they are embedded and offer suitable methods for mindfulness training and practice (Calhoun, Cann, & Tedeschi, 2010) and to be an *expert companion* in the process of encouraging PTG (Calhoun & Tedeschi, 2013). For example, certain individuals may respond better to more secularized versions of mindfulness practices, such as Mindfulness Based Stress Reduction programs, whereas others may resonate more with spiritually oriented practices such as those stemming from Christian or Hindu lineages. In addition, others may benefit from alternate forms of mindfulness practice, such as yoga, tai-chi, or other movement-based practices in which an emphasis on physical form in motion serves as the vehicle for the development of attention and awareness.

Conclusion

In conclusion, the past two decades have seen the topic of mindfulness begin to emerge as an accessible and cost-effective vehicle for health-behavior change and psychosocial wellness. It is an exciting time for the field of contemplative science as scholars begin to assemble testable theoretical models that will undoubtedly advance the field and lead to a wide array of interesting clinical and empirical findings. Our research and that of many others has provided support

for many aspects of the mindfulness-to-meaning theory, yet there are still important questions pertaining to the applicability, efficacy, and generalizability that warrant additional examination. We commend Garland et al. (this issue) for their work in developing this model and look forward to the field’s response.

Note

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