

What Does a Personality Science Approach to Post-Traumatic Growth Reveal?

Laura E.R. Blackie¹ & Eranda Jayawickreme²

¹University of Nottingham

²Wake Forest University

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Comments should be addressed to Laura E.R. Blackie, School of Psychology, University of Nottingham, University Park, Nottingham, NG7 2RD, UK, Laura.Blackie@nottingham.ac.uk; Eranda Jayawickreme, Department of Psychology and Program for Leadership and Character, Wake Forest University, Winston-Salem, North Carolina, 27109, USA; jayawide@wfu.edu.

What Does a Personality Science Approach to Post-Traumatic Growth Reveal?

Post-traumatic growth is focused on studying the positive changes in traits, identity, worldviews, and relationships that individuals may experience in the aftermath of adversity. Recent research has advocated for conceptualizing post-traumatic growth as positive personality change after adversity (Jayawickreme et al., 2021; Jayawickreme & Blackie, 2014). However, most research continues to use methodologically suspect assessment tools and rely on unsupported theoretical assumptions (Blackie et al., 2015; Jayawickreme et al., 2018). This raises the important question of how personality scientists and clinical psychologists can collaborate more successfully in the pursuit of high-quality research on this topic (Hopwood, 2018). Although analysis of existing longitudinal datasets from national panel studies hold the potential to generate significant theoretical and empirical advancements (Anusic & Yap, 2014), the lack of clarity on how current understandings of post-traumatic growth fit into current models of personality change continues to hinder progress.

At the European Association for Personality Psychology (EAPP) expert meeting on "Integrating Post-Traumatic Growth and Personality Change", held at the University of Nottingham, Nottingham, UK, on September 16-17, 2019, we responded to this concern by critically discussing important next steps in the study of personality growth. Specifically, we focused on how researchers could improve the quality of research being done in the context of the credibility revolution (Vazire, 2018; Vazire et al., 2022) and facilitate collaborations between personality scientists and other psychologists to advance a coherent research agenda on this question. Questions that we discussed include:

- Can prominent theories of post-traumatic growth be reconciled with prominent personality accounts (e.g., Whole Trait Theory, Social Investment Theory, Five-Factor Theory, TESSERA)?
- How do narrative accounts of personality fit with theories of post-traumatic growth?
- How does post-traumatic growth manifest in daily life?
- What are the event characteristics that determine whether an event leads to personality growth?
- What is the role of reflective vs. automatic processes on personality growth following adversity?
- How can existing longitudinal datasets help in answering key questions on personality growth following adversity?

This meeting led to the present set of 15 articles. The majority of the papers empirically assessed the evidence for post-traumatic growth after adversity across a range of personality constructs. These papers found limited evidence for personality growth, and raise important questions for future research about the personality constructs we study in relation to post-adversity change and timelines for assessing the changes. One theoretical paper by Weststrate et al. (this issue) directly engages with these findings, and poses important questions about the level of personality on which post-traumatic growth could be studied and when, after adversity,

it might be observed in each level. Yet, despite the limited evidence for post-traumatic growth as a ubiquitous outcome of adversity, some papers found evidence showing that factors including age or gender, perceptions of social support and individual differences in character traits were predictive of adaptive responses to the adversity. Finally, several papers either empirically or theoretically discussed the importance of studying different types of life events within context. Next, we will discuss each of these broader themes in turn.

Limited Evidence for Personality Growth After Adversity:

The issues with studying post-traumatic growth cross-sectionally and with retrospective questionnaires have been well documented (Blackie et al., 2015; Jayawickreme & Blackie, 2014), but two papers in this issue highlight some of the challenges and the importance of longitudinal measurement to this topic. First, Harvey and Blackie (this issue) demonstrated that individuals' perceptions of post-traumatic growth for others and themselves on standard surveys are underpinned by two mechanisms. While one mechanism – deliberative rumination – is consistent with theory on post-traumatic growth (Tedeschi & Calhoun, 2004), the other mechanism of deservingness reflects a defensive attempt to re-appraise suffering to restore belief in a just world. Critically, the results suggest that individuals' reports of post-traumatic growth on standard questionnaires may reflect distinct motivations, and examination of survey scores alone cannot determine which motivation influenced individuals' responses.

Second, Gander and Wagner (this issue) compared individuals' perceptions of character trait changes with longitudinal changes in these character traits before and after the first wave of the COVID-19 pandemic. Individuals reported changes in 21 of 24 character traits assessed when asked to retrospectively think if they had changed as a result of the pandemic, but pre-to-post pandemic change was only observed in humility and prudence when examined longitudinally. Collectively, these two papers show that retrospective survey assessments of post-traumatic growth have limitations and should not be assumed to accurately capture how individual change from pre-to-post adversity in real time.

Given the limited research into whether adversity is a catalyst for personality growth or not, most papers in this special issue focused on addressing this question with longitudinal data across a range of personality constructs, adverse experiences, and participant populations. Yet, the common theme across these papers is there was little longitudinal evidence for personality growth on average. Forgeard et al. (this issue) found that, on average across individuals, openness to experience remained stable over 12-months after recent and major life stressors when assessing multiple indicators for openness in a longitudinal case-control design, which compared individuals who had experienced a major stressor and (high or low) distress symptoms to control individuals with low distress and no major life stressor in the 2-years prior to the study. Blackie and McLean (this issue) found little evidence to support average personality growth in the traits of empathy, humility, and compassion after individuals repeatedly narrated their interpersonal transgressions against their romantic partner over the course of 12-months. Fassbender et al. (this issue) observed no average post-event change in empathy or prosociality 6 to 9 months after young adults experienced a major life event, and participants' ratings of the negativity of the experience did not predict changes in these traits. Finally, Laceulle et al. (this issue) examined changes in compassion over 13-months among young adult Syrian refugees who had recently resettled in the Netherlands. Laceulle and colleagues observed small average

decline in trait compassion over time, but pre-migration adversity did not predict differences among individuals in compassion's changes over time.

Little evidence of average growth was similarly observed in prospective longitudinal studies. Dorfman et al. (this issue) observed little evidence of average growth when examining wise reasoning among individuals who had experienced a diverse range of adverse experiences from trauma to economic hardship among others in a prospective 4-wave longitudinal design over course of a year. Similarly, in a prospective design over 2-years, Infurna et al. (this issue) found no significant average changes in gratitude, compassion, spirituality and an average decline (rather than growth) in life satisfaction, generativity and meaning-making in response to major life stressors in a midlife adult sample. Furthermore, when taking an innovative multidimensional approach to the analysis across the multiple outcomes, Infurna et al. observed that on average, individuals experienced personality growth in less than one outcome.

Individual Differences Influencing Adaptive Responses to Adversity

Although the papers in this issue do not show positive personality change as a ubiquitous outcome of adversity, many papers identified key individual differences that predicted adaptive responses in the aftermath of adversity. For example, Chopik et al. (this issue) replicated their past research and identified two classes of change in character strengths among newly deployed US military personnel. Notably, and similar to the papers previously described, neither of the two classes represented a profile of personality growth from before deployment to 3-years afterwards. Membership to the resilient class where high character strengths were maintained across the pre-to-post deployment period was represented by 50-63% of the sample depending on the character strength assessed. Critically, there were several demographic (i.e., male and older age) and military-specific factors (i.e., longer length of service) that predicted a higher likelihood of being in the resilient class, but self-reported physical health at baseline was the strongest predictor across the character strengths.

Similarly, although Infurna et al. (this issue) did not find evidence for average personality growth from pre-to-post major life stressor, they did find that individual differences in anticipated social support and low interpersonal strain in relationships were associated with better functioning in multiple outcomes. For example, individuals who had anticipated greater social support reported higher levels of meaning immediately after the major stressor occurred and changes in the post-stressor period, whereas higher levels of interpersonal strain was associated with lower meaning immediately after the stressor had occurred. Infurna et al. argued that their results indicate that supportive social relationships might be an essential resource for adjustment following adversity.

In another context altogether, Gander and Wagner (this issue) observed that character strengths measured up to 1.5 years before the first wave of the COVID-19 pandemic were associated with self-reported adaptive behavioral responses to the pandemic. For example, individuals higher on pre-COVID character strengths of judgment, perseverance, humility, and prudence self-reported greater compliance with national COVID regulations. They also observed relationships between some pre-COVID strengths and self-reported volunteering behavior during the first wave of the pandemic.

Finally, results from papers in this issue show that the study of how individual differences influence adjustment after adversity is complex and nuanced. For example, Dorfman et al. (this

issue) found that engagement in self-distancing did not predicting changes in wisdom over time at the between-person level. However, they did find that individuals who engaged in greater self-distancing after adversity compared to their usual level evidenced stability in their wisdom over time, whereas individuals who engaged in less self-distancing after social conflicts compared to their usual level evidenced declines in their wisdom over time. The findings from this study highlight the importance of examining within-person relationships in this context (Jayawickreme et al., 2017).

Studying Adversity Within Context:

Although some of the papers presented in this section had similar aims to those discussed under the limited evidence for personality growth heading, these papers also made significant contributions insofar as their study of the impact of adversity was situated within the relational, social, or cultural context in which the adversity occurred. For example, Reitz et al. (this issue) used a 2-wave prospective longitudinal design to examine the impact of bereavement of a close friend or family member on the self-esteem and life satisfaction of both individuals in a romantic partnership. Consistent with the results from the other papers discussed in the previous section, Reitz and colleagues did not find evidence of average personality growth, insofar as bereavement did not predict self-esteem or life-satisfaction at wave 2 in either of the romantic partners. However, a particular noteworthy aspect of this study design was that it examined interdependent effects of adversity on both individuals, which acknowledges that bereavement of a close other is a shared experience in committed partnerships, rather than an adversity that solely impacts one partner independent of the other.

A theoretical paper by Lamarche (this issue) further developed this premise by proposing insights from independence theory and relationship science could serve to advance research into post-traumatic growth. Specifically, Lamarche claimed that while relationship dissolution can be one motivation for personality change, the structure and dynamics of romantic partnerships can also act to promote personality growth for each individual in the partnership. One such example given by Lamarche focused on how the interdependent structure of relationships can motivate individuals to make continued changes to accommodate their partner's needs after instances of interpersonal conflict, and these changes may facilitate personality changes over the longer term. Lamarche also questioned some of the traditional constructs assessed in post-traumatic growth as indicators of positive relationship changes, such as feelings of closeness. Instead, Lamarche argued that a focus on changes in dispositional personality traits and relational behaviours might be more appropriate than measuring feelings of closeness to a partner, because drawing support from romantic partners (and the resulting feeling of closeness) is an adaptive coping response to adverse situations, rather than an indication of change in the relationship dynamic and structure.

Turning to another study of adversity within context, Serrano et al. (this issue) examined the impact of personal and parental adversity on the co-development of effortful control across 6-years in a sample of Mexican-origin adolescents. The results indicated that greater personal adversity experienced by adolescents was associated with decreases in the development of their effortful control, therefore providing evidence to the contrary of post-traumatic growth. While the effects were strongest and only significant for personal adversity, this study design adopted a broader definition of adversity and acknowledged adversities experienced within the parents'

lives could serve to impact on the family environment and thus also impact on the adolescents' personality development.

Chung et al. (this issue) provide a thoughtful reflection on the research process of their study of personality change with a sample of resettled Syrian refugees. Particularly of note to the current discussion was how the research project evolved and changed in response to not only challenges encountered along the way, but through a greater understanding of the participants' needs and expectations of the project and their participation. For example, Chung et al. discuss how participant feedback showed that the motivation to participate was based on participants' desire to share their stories both inside and outside their community. This led to adapting some of the methodologies to include more open-ended questions and narratives to allow participants to describe their journey from Syria to the Netherlands in their own words. Chung et al. also describe the study procedures they adopted to ensure that the research project was more than data collection and served to enrich the experience of participants involved in the project. Some of these procedures involved having a cultural advisory board to consult on study processes and materials, ensuring diversity in the research team including ensuring some team members shared the same cultural background and language of participants, and the co-development of project events with participants. Essentially, Chung et al. provide a commentary on the many important conceptual, methodological, ethical, and practical issues researchers should carefully consider when conducting research with hard-to-reach and potentially vulnerable populations. This paper directly captures the topic of discussion in this section surrounding the importance and value of research that is situated and conducted within its ecological context.

Future Directions for Post-Traumatic Growth Research

One of the major themes to result from this special issue is the distinct lack of evidence for personality growth following adversity, at least in the relative short-time frames of 1-2 years employed in these studies. Our previous work has argued that research on post-traumatic growth would be advanced by conceptualizing and operationalizing this construct as positive personality change (Jayawickreme et al., 2021; Jayawickreme & Blackie, 2014), so given the lack of evidence for it across a diverse range of both personality constructs and adversities, where does that leave the status of research in this area?

One explanation for the lack of evidence for a link between adverse life events and personality change may be that current research (including many of the papers in this special issue) do not successfully capture the key psychological characteristics of life events that motivate personality change. In other words, the affective (i.e., "traumatic") nature of the event may not always be the key predictor of whether the event motivates personality change. Notably, recent work has attempted to identify and measure a broader set of perceived characteristics of life events (Luhmann et al., 2021). Building on this research, Rakhshani et al. (this issue) examined the associations between the Big Five personality traits and perceptions of life event characteristics. They found differences in the associations between the personality traits and beliefs about event-related personality change in students and non-student samples, nuanced associations between the traits and event perceptions, and, importantly, that event perceptions do not simply reflect proxies for personality traits. Further research identifying which perceived life characteristics predict personality change is an important direction for future research.

The theoretical paper by Weststrate et al. (this issue) engages more broadly with the question of the possibilities of personality change, focusing specifically on how post-traumatic growth can be studied as positive personality change within the three tier (or level) framework of personality (McAdams & Olson, 2010). This paper offers a comprehensive exploration of the evidence for post-traumatic growth within each of the levels – dispositional traits, characteristic adaptations, and life narratives – along with the personal, social, and cultural resources that may facilitate growth at each level. While a detailed summary of the model is beyond the scope of our editorial, we wanted to emphasize the following two points that we believe will serve as fruitful areas of research in the immediate short-term.

First, although Weststrate et al. argue that personality growth could occur on all levels, they view the narrative identity level of personality to be the more malleable and susceptible to change, whereas personality traits to be relatively more fixed and resistant to change in a predictable way. The narration of the life story is after all an active process where individuals revisit and change their life story based on selected life experiences and in light of their interpretation and the meaning attached to such experiences. This process naturally lends itself to the processing of adverse life experiences, and changes to the content of an individual's internalized and evolving life story in light of traumatic experiences may provide insight into meaningful shifts in the individual's self-understanding and worldviews. Although Blackie and McLean (this issue) examined how the act of narration for interpersonal conflicts was associated with changes in interpersonal character traits, similar to Weststrate et al. they also argued that the examination of narrative identity as the outcome of personality growth with prospective longitudinal narrative methodologies would be a fruitful area for future inquiry.

Second, Weststrate outlined the dynamic interplay of change across the different levels of personality, arguing that the most enduring form of post-traumatic growth will be evidenced with eventual changes across all levels. Little is known about the interplay of change across these levels currently, but it is possible that the narrated changes to self-understanding and worldviews in the life story would influence the individual's motivations, values, and goals (i.e., characteristic adaptations) and eventually to localized changes in the facets of personality traits associated with changes in these other levels. Examining the possibilities for such change is an important goal for future research, despite the question of whether the different levels of personality can be empirically separated (e.g., Henry & Möttus, 2020) as well as the possibility that some assessments of narrative identity may suffer from proneness to similar biases as measures of perceived growth (Boals et al., 2022).

An additional possibility is that changes in traits and characteristic adaptations are not ubiquitous (as suggested by Infurna et al., this issue). The relative rarity of growth suggests that nomothetic approaches to personality change may be ill-suited to identifying instances of such change (Beck & Jackson, 2020). Future research examining PTG in terms of ideographic personality change would facilitate a deeper understanding of how some people may experience personality growth through the experience of major life events while others change in opposite directions or remain unchanged (see Beck & Jackson, 2021, for one recent example).

In summary, we hope that these papers provide a possible foundation for a more robust and credible personality science of post-traumatic growth. Despite the substantial contribution of the authors here, many questions remain about the possibility, ubiquity, trajectory and quality of positive personality change after adversity. We are nevertheless confident that the upcoming

generation of personality scientists will tackle these questions to gain a deeper understanding of one of life's most pressing questions—whether there are benefits to experiencing adversity.

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