



OPEN ACCESS

EDITED BY

David F. Carreno,
University of Almeria,
Spain

REVIEWED BY

Wojciech T. Kaftanski,
Harvard University,
United States
Nikolett Eisenbeck,
Sevilla University,
Spain

*CORRESPONDENCE

Brian H. Ge
✉ bhge@uchicago.edu
Fan Yang
✉ fan.yang@uchicago.edu

SPECIALTY SECTION

This article was submitted to
Positive Psychology,
a section of the journal
Frontiers in Psychology

RECEIVED 01 December 2022

ACCEPTED 02 March 2023

PUBLISHED 07 July 2023

CITATION

Ge BH and Yang F (2023) Transcending the self
to transcend suffering.
Front. Psychol. 14:1113965.
doi: 10.3389/fpsyg.2023.1113965

COPYRIGHT

© 2023 Ge and Yang. This is an open-access
article distributed under the terms of the
[Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/).
The use, distribution or reproduction in other
forums is permitted, provided the original
author(s) and the copyright owner(s) are
credited and that the original publication in this
journal is cited, in accordance with accepted
academic practice. No use, distribution or
reproduction is permitted which does not
comply with these terms.

Transcending the self to transcend suffering

Brian H. Ge * and Fan Yang *

Department of Psychology, University of Chicago, Chicago, IL, United States

Suffering is inevitable in human life. Our perspective paper theorizes on precise mechanisms for how *self-transcendence*—the state in which an individual looks beyond the self and adopts a larger perspective including concern for others and the world—may help people endure the experience of suffering. From an examination of empirical literature ranging from social psychology to clinical research, we propose that self-transcendence may aid the endurance of suffering along three psychological levels: (1) On the level of affect, the unique profundity and positivity of *self-transcendent experiences* (e.g., awe, flow, compassion) may *supersede and reduce the salience* of negative affect arising from suffering (e.g., fear, despair, depressive mood). (2) On the level of cognition, the larger frame of reference provided by *self-transcendent thinking* may *contextualize* one's suffering as something comprehensible, thereby helping to resolve the challenges of making meaning from suffering (e.g., that one's existing meaning systems are unable to explain the suffering event). (3) On the level of motivation, the drive to fulfill one's *need for self-transcendence* may counterbalance the more hedonically-oriented motivations that can promote negative coping strategies in response to suffering (e.g., avoidance, substance abuse). All three mechanisms may also provoke downstream prosocial behaviors that help embed the individual into networks of social support. Altogether, by synthesizing specific mechanisms from affective, cognitive, and motivational self-transcendent processes, our paper establishes a theoretical framework for how self-transcendence may help people endure and transcend suffering, thereby elevating the conditions and experiences of our existence.

KEYWORDS

self-transcendence, suffering, human existence, meaning in life, coping strategies, positive emotions

Introduction

The history of human suffering is arguably as ancient as humanity itself. The oldest work of poetry in print today, *The Epic of Gilgamesh* (ca. 2750-2500 B.C.E./2003), details the story of a mighty king tormented by the grief he feels for his beloved's death as well as by the terror he suffers at the thought of his own. Whether it surfaces in Gilgamesh's ancient city of Uruk or in the intensive care unit of a modern hospital, suffering has been considered one of the great tragedies fundamental to human existence (e.g., Frankl, 1946/1992). For certain thinkers of philosophy, suffering in life is often unavoidable and too grueling to bear, so much so that it would have been better to have never come into being (e.g., Benatar, 2008; Schopenhauer, 2020). In spite of such doctrines, humanity has persisted all the same, driven perhaps by the hope that one might still derive from existence some durable reason or means to face one's suffering and endure it. Substantial empirical research has examined various strategies (e.g., self-regulation of emotion) and factors (e.g., social support) that may help people cope with events of adversity in

life, mostly from clinical perspectives and targeted at specific forms of suffering (e.g., trauma, illness, psychological disorders) (e.g., Matthews and Cook, 2009; Freh et al., 2013; Papa et al., 2013; Shear et al., 2014; Gruszczyńska and Knoll, 2015; Shear, 2015). The present perspective paper aims to articulate how *self-transcendence*—the state in which an individual looks beyond the self and adopts a larger perspective including concern for others and the world—may help people endure suffering as a form of positive coping. Building on existing literature and consistent with the propositions of second-wave positive psychology (Wong, 2019), we propose a theoretical framework specifying the effects of self-transcendence along three levels of analysis: the affective, the cognitive, and the motivational.

What precisely is “suffering”? A common definitional choice is to conflate it with pain (e.g., Vanden Bos, 2007). Although in everyday language, “pain” and “suffering” are indeed mentioned together frequently and even interchangeably, there are key distinctions between the two. Pain is the direct unpleasant physical or psychological sensation that may arise from different activities or events in life. Pain often can cause suffering, but not necessarily so. Some pain, such as what is felt when eating spicy food, taking a hot bath, or even feeling the muscle-burn of a strenuous workout can be experienced by many people as desirable (Bloom, 2021) instead of as a form of suffering. Other typically more severe cases of physical or psychological pain, such as what is felt when becoming terminally ill or struggling with a psychological disorder (Pompili et al., 2012; Wachholtz et al., 2016; Svenaeus, 2020; Lewis et al., 2021), are more likely to be experienced as negative and aversive. Many philosophers and psychologists consider that it is this mental disruption or aversion in response to pain that qualifies as suffering (e.g., Kauppinen, 2019; McClelland, 2019; VanderWeele, 2019; Brady, 2021; Stilwell et al., 2022). We thus adopt the view that suffering is not the sensation of pain itself, but rather *the negative and aversive mental state in response to physical or psychological pain*. Conceptualizing suffering as a mental state rather than purely a sensation opens the possibility that it can be potentially moderated by psychological mechanisms, the processes of which we will articulate in this paper.

Self-transcendence is a reorientation from egotism toward concern for others and the world. Self-transcendence has been examined from diverse perspectives in the literature, including as a phenomenological experience of ego-dissolution, a set of prosocial motivations and behaviors, a subtype of emotion, an attribute of religious experience, as well as a constellation of character strengths (Montemaggi, 2017; Stellar et al., 2017; Yaden et al., 2017; Kitson et al., 2020; Lavy and Benish-Weisman, 2021; Liu et al., 2022). As a multifaceted psychological phenomenon, the common feature across different manifestations of self-transcendence is that egotistic interests cease to be the individual's predominant focus; a perceived higher value presents itself in a target beyond the self, whether in other people, divinity, or even an overarching concept of nature (Stellar et al., 2017; Castelo et al., 2021; Magyar-Russell et al., 2022). Our paper examines the construct of self-transcendence at three levels of psychological processes: affect, cognition, and motivation. We surmise that these three levels may each have distinct benefits for the endurance of suffering and may also interact together in their functions.

The notion that self-transcendence may be a balm for suffering has rich roots in philosophy and psychology, particularly with regards to its theoretical connection to life-meaning. For example, based on

his experiences in the Holocaust, Frankl (1946/1992) proposes that the life-meaning which best aids the endurance of suffering is discovered from devotion to something beyond the self. In an effort to solidify Frankl's propositions into operable constructs, Wong (2013) defines meaning as a multidimensional construct in the PURE model (i.e., purpose, understanding, responsible action, emotional evaluation). The model lays out meaning's implications for suffering, with self-transcendence referenced as a significant source of such meaning. The benefits of meaning in contending with adversity have been subsequently examined in the literature of meaning-centered coping (e.g., Eisenbeck et al., 2021; Sanchez-Ruiz et al., 2021; Avsec et al., 2022; Eisenbeck et al., 2022), and additional study in other frameworks has likewise affirmed the perceived link between self-transcendence and meaning (Huang and Yang, 2022). We wish to emphasize here, however, that although self-transcendence is closely related to the concept of meaning, it is nonetheless fruitful to examine self-transcendence as a distinct and coherent construct of its own. Our definition of self-transcendence—the state of looking beyond the self toward a larger perspective including others and the world—is concerned fundamentally with how one relates to the self. Such a definition differs from that of meaning, which has been conceptualized as consisting of sub-components like life-coherence, significance, purpose, and experiential appreciation (e.g., Martela and Steger, 2016; Kim et al., 2022). Our intent is specifically to help build upon the qualities and functions of the self-transcendence construct. Where Frankl's (1946/1992) proposition is that self-transcendence may give rise to a sense of meaning that helps people endure suffering, we wish to focus on self-transcendence in particular and theorize more specifically how it may help people endure suffering—not only through meaning—but through all manner of affective, cognitive, and motivational mechanisms.

On this subject of understanding self-transcendence's benefits, Wong et al. (2021) frame self-transcendence as an overarching means by which suffering might be integrated into pursuit of perceived higher goals or values. Self-transcendence in this proposition involves unconditional investment in the betterment of others (Communion), the actualizing of a better form of self (Hope), and the reverence of an ideal (Faith). In this manner, the endurance of personal suffering would be made possible *via* dedication to these three domains beyond the self (Wong et al., 2021). Empirical study has affirmed that self-transcendent values and experiences bear positive associations with diminished depressive symptoms, improved emotional well-being, and post-traumatic growth (Bojanowska and Kaczmarek, 2022; Monroy and Keltner, 2022; Xie et al., 2022).

We propose that self-transcendence bears benefits for the endurance of suffering along three psychological levels: (1) On the level of affect, the unique profundity and positivity of *self-transcendent experiences* (e.g., awe, flow, compassion) may *supersede and reduce the salience* of negative emotions arising in suffering (e.g., fear, despair, bitterness). (2) On the level of cognition, the larger frame of reference provided by *self-transcendent thinking* may *contextualize* one's suffering as something comprehensible, thereby helping to resolve the challenges of making meaning from suffering (e.g., that one's existing meaning systems are unable to explain the suffering event). (3) On the level of motivation, the drive to fulfill one's *need for self-transcendence* may counterbalance the more hedonically-oriented motivations that can promote negative coping strategies in response to suffering (e.g., avoidance, substance abuse). Beyond these direct benefits,

self-transcendence is theorized also to promote downstream behavioral and social consequences that wield their own benefits, including strengthening one's connections to networks of social support. We discuss further the mechanisms involved at each level of analysis as well as their interactions below.

Effects of self-transcendent experiences on suffering

The experience of suffering often entails negative affect, such as depressive mood states or negative emotions like grief, guilt, and anger (Freh et al., 2013; Kim et al., 2021). Severe negative affect may disrupt facets of daily life, as with cases of unexpected rushes of negative emotion accompanying intrusive thoughts (e.g., Calhoun, 2013b; Park and Kennedy, 2017). This attribute of intrusiveness indicates that the negative affect in suffering has potential to metastasize; otherwise-neutral domains of living may, in their disruption by these sudden upsurges, become themselves sources of additional suffering (VanderWeele, 2019). Excessive negative emotion has been connected to the development of depressive disorders, complications in grieving in cases of bereavement, and even detriments to physical health (Keyes, 2002; Zhang et al., 2006; Young et al., 2019; Frumkin et al., 2021). Therefore, the salience and potential intrusiveness of negative affect comprise a predominant problem to be addressed in the endurance of suffering.

Due to its power to promote profoundly positive affective states, self-transcendent experiences may reduce the salience of negative affect in suffering. Self-transcendent experiences (e.g., flow, awe, compassion) are characterized by the perceived dissolution of the boundaries of the self and an enhanced unity with other people or the world (Stellar et al., 2017; Yaden et al., 2017). This sense of unity is associated with a positive—even ecstatic— affective state, in tandem with a diminishing salience of selfhood (Hood, 1975; Hanley et al., 2020; Kitson et al., 2020). As an illustration, flow is a self-transcendent experience elicited by the performance of a deeply rewarding yet appropriately challenging task, and its defining characteristic is a total attentional focus on the task alongside a correspondingly low level of self-consciousness (Nakamura and Csikszentmihalyi, 2002; Croom, 2015; Yaden et al., 2017). This complete absorption into an intrinsically positive state may lessen the weight of one's negative affect. The self-transcendent experiences (e.g., flow, awe, compassion) derived from activities such as communal worship, musical performance, or immersion in vast scenes of nature have been linked to the heightening of positive affect, mitigation of negative affect, and efficacious therapeutic outcomes (e.g., Reynolds and Prior, 2006; Matthews and Cook, 2009; Moss, 2019; Kim et al., 2021; Monroy and Keltner, 2022).

As a caveat, profoundly positive as self-transcendent experiences may be, they do not aid the endurance of suffering solely by dint of being positive. Prior theories (e.g., Wong et al., 2021) make clear that the function of self-transcendence is not merely to reduce suffering, but also to engage with it in a manner that draws out some goodness despite its initial negativity. The positivity in self-transcendent experience does powerfully counterbalance the aversiveness of suffering, but there are additional benefits posed *via* bidirectional connections to the cognitive and motivational components of

self-transcendence as well. These interactions will be discussed further in later sections.

Effects of self-transcendent cognition on suffering

During moments of suffering, there is often a need to comprehend the causes and effects of the events that gave rise to the suffering (Gan et al., 2013, 2018; Calhoun, 2013a; Courtois, 2017; Park, 2020). This desire can be conceptualized as a need to reconcile the initial negative implications of suffering with one's *global meaning*—fundamental beliefs of how the world works (e.g., the just world hypothesis or views of human nature) (Freh et al., 2013; Gan et al., 2013; Park and Gutierrez, 2013).

Two challenges may arise from such meaning-making processes. First, meaning-making involves the distressing possibility that one's global meaning belief systems are too optimistic or otherwise unable to account for the meaning of a suffering event (e.g. Calhoun, 2013c; Pak, 2019; Frounfelker et al., 2020). In such instances, there appears to be an irreconcilable rupture in one's conception of the world, and the failure to mend it may manifest in the intrusive thinking that produces the unexpected waves of grief mentioned prior (Calhoun, 2013b; Steger et al., 2015; McAdams and Jones, 2017; Pak, 2019; Milman et al., 2020). Second, to accommodate the meaning of suffering, individuals may shift their global meaning beliefs in a manner that makes negativity the predominant feature (Park et al., 2012; Gerrish et al., 2014; Gerrish and Bailey, 2020), as in the adoption of cynicism or existential nihilism. Such negative belief orientations are associated with poor well-being outcomes ranging from depressive and anxiety symptoms to suicidal ideation (Nierenberg et al., 1996; Dangel et al., 2018; Forsythe, 2021). Thus, the threat of failure to comprehend the meaning of a suffering event, as well as the potential negative global meaning one might derive, comprise a dimension of suffering that demands cognitive pathways of resolution.

Self-transcendent cognition—the reasoning and appraisal of phenomena according to a frame of reference beyond the self—gives rise to global meaning beliefs that may successfully account for suffering without setting negativity as the predominant feature. This self-transcendent cognition can occur *via* adopting a reasoning from the perspective of social entities beyond the self or even of abstract spiritual ones such as the idea of nature overall (e.g., Block, 2001; Frounfelker et al., 2020; Monroy and Keltner, 2022). Empirical research has found that people's perceptions of meaning are greatly influenced by a sense of self-transcendence (e.g., making a positive impact on society) (Huang and Yang, 2022). As a concrete example, an examination of positive coping strategies in response to cancer found that reframing one's terminal illness as part of natural cycles of “creation and destruction” may aid the peaceful acceptance of death (Block, 2001). Instead of prompting rumination over suffering as something happening specifically and unfairly to the self, the appraisal of one's suffering as natural recontextualizes it as something shared with the whole of humanity. Moreover, such self-transcendent systems of global meaning may likewise successfully incorporate the suffering event—the prospect of death linked to “destruction” in the given example—into a perspective that also emphasizes positive features such as “creation,” thereby accounting

for negativity in existence without sacrificing the positive. In contrast, cynicism or nihilism also do provide explanations for suffering, but they do not allow for the inclusion of such positivity and thereby lead to their associated negative well-being outcomes (Dangel et al., 2018; Forsythe, 2021). In providing an orientation of global meaning with a larger perspective and a focus on superordinate values, self-transcendent cognition may thus help resolve both the struggle to formulate acceptable meaning of suffering as well as the potential for maladaptive interpretations.

Effects of self-transcendent motivation on suffering

On the level of motivation, the presence of suffering again provokes a twofold challenge. The first is that the inherent aversiveness of suffering triggers motivational systems oriented toward immediate alleviation of suffering (e.g., the desire to flee from the circumstances of one's suffering). Though the hedonic motivation to mitigate displeasure is not necessarily maladaptive, fixation on such mitigation at the expense of other motives necessary for well-being may result in drives toward negative coping mechanisms such as avoidance, substance abuse, or self-escape (Carver and Connor-Smith, 2010; Freh et al., 2013; Giuntoli et al., 2021). Second, the aforementioned threats to cognitive global meaning may also hamper one's eudaimonic motivations toward purpose (Park, 2008). Global meaning beliefs, in addition to providing coherent understandings of the world, also include prescriptive beliefs from which one may derive goal-oriented purpose in life (e.g., that one should help the sufferings of others) (Koltko-Rivera, 2004; Martela and Steger, 2016; McAdams and Jones, 2017; Park and Kennedy, 2017). To cast one's global meaning beliefs into doubt may therefore produce the aimlessness and avolition characteristic of "languishing" (Keyes, 2002). The risk of succumbing to overly hedonistic motivations and the risk of falling to an outright vacuum of motivations are the two motivational challenges posed by suffering.

Self-transcendent motivation is defined here as the drive to be devoted to an entity beyond oneself in terms of one's goals and purposes, which may lead to the tolerance and even embrace of suffering. For example, the desire among religious people to obey the edicts of their concept of the divine has been observed to compel outright embrace of one's suffering as an opportunity to demonstrate religious devotion, even amid especially severe cases of pain such as cancer and childbirth (Krause and Bastida, 2011; Taghizadeh et al., 2017). The same motivation to willfully engage with one's suffering in spite of its aversiveness has also been observed in non-religious forms of self-transcendence (e.g., desire to fulfill the self-sacrificial commitments of *agape* love) (Ozawa-de Silva et al., 2012; Van de Goor et al., 2020; Enright et al., 2022; Sørensen and Lien, 2022). As a point of differentiation, this motivation toward self-transcendence is fundamentally distinctive from the motivation toward self-escape (e.g., to "drown one's sorrows" in alcohol): though both entail a desire to lessen the burden of self-awareness, self-transcendent motivation does so through affirming meaningful connections with entities beyond the self, whereas self-escape motivation is driven by a desire to numb meaningful thought and thereby avoid awareness of suffering

(Baumeister, 1990; Yaden et al., 2017). Self-transcendent motivation, if adequately engaged-in, compels the individual beyond the push and pull of hedonistic sensualism toward the goal-oriented purposefulness characteristic of more holistic forms of well-being.

Interactions between the three levels of self-transcendence

These three levels of self-transcendence do not operate in isolation from one another, but rather may each promote one another in the endurance of suffering. Past literature has suggested Meaning-Centered Coping yields its benefits along a holistic set of trajectories (e.g., positive reframing, engagement in meaningful activities, prosociality, etc.) (Wong, 2013; Eisenbeck et al., 2021), and we surmise the benefits of self-transcendence may function in a similar manner. We have established that the problem of suffering entails multiple fronts, including overwhelming negative affect and threats to systems of global meaning. This multifaceted nature of suffering ensures that the solutions best suited to combating it must be correspondingly holistic in their effects.

For example, self-transcendent experiences such as awe may give rise to a sense of meaning and provoke meaning-making processes that help solidify self-transcendent cognitive beliefs and values (Stellar et al., 2018; Zhao et al., 2019; Rivera et al., 2020; Monroy and Keltner, 2022; Kim et al., in press). Inversely, reframing one's suffering through self-transcendent cognition may likewise induce some self-transcendent experiences, such as feelings of serenity derived from believing in natural forces greater than the self (Kreitzer et al., 2009; Garcia-Romeu, 2010). To contrast, some positive but non-self-transcendent experiences such as the pleasure of a good meal may alleviate the experience of suffering to some extent, but it would not address the needs for global meaning or purpose that have also been provoked by suffering.

Similarly, both self-transcendent experiences and self-transcendent cognitive beliefs can incentivize self-transcendent motivations. As an example, self-transcendent experiences from spending time in nature have been connected to a drive for prosocial behaviors due to feelings of greater connectedness with the world (Castelo et al., 2021). Likewise, the prescriptive values entailed in self-transcendent cognitive beliefs comprise the goals and purpose that compel self-transcendent motivations (Koltko-Rivera, 2004; McAdams and Jones, 2017). As an outcome of one's cognitive religious beliefs, as noted prior, one may have a strong motivation to serve others (e.g., Krause and Bastida, 2011). In this fashion, all three levels of self-transcendence may feed into each other and thereby trigger cascades of each other's mechanisms in aiding the endurance of suffering holistically.

Downstream behavioral and social effects of self-transcendence

We conceptualize self-transcendence as a set of subjective mental processes, but its effects do not necessarily remain confined to the mind of the individual. Past research has suggested that subjective processes like meaning may stimulate constructive and prosocial behaviors (e.g., Van der Heyden et al., 2015; Klein, 2017; Eisenbeck

et al., 2021), and we correspondingly hold that self-transcendent experiences may also have these positive effects on prosociality. For example, self-transcendent experiences such as awe motivate people to perform prosocial behaviors such as helping (Piff et al., 2015; Perlin and Li, 2020). In addition, self-transcendent experiences involving the sense of unity with others (e.g., communal worship, patriotic camaraderie in war) have been found to promote prosocial and pro-group behaviors (Swann and Buhrmester, 2015; Moss, 2019). These outward expressions of self-transcendence may also serve to signal prosociality to others and promote reciprocal positive social connections, giving rise to the systems of support that have been consistently observed as a potent resource for adaptive coping of suffering (Stallard et al., 2001; Matthews and Cook, 2009; Freh et al., 2013; Al-Kandari et al., 2017; Hoang et al., 2020; Fu et al., 2022).

Conclusion

Our theoretical model maps out the precise effects self-transcendence may have in aiding the endurance of suffering. Prior research has measured self-transcendence primarily as general *personality traits* or *disposition* (e.g., Garcia-Romeu, 2010). Based on our theoretical model, it may be fruitful to adopt a different approach and measure self-transcendence as three interrelated *psychological processes*. Our approach provides the theoretical basis for operationalizing self-transcendence empirically at different levels of analysis. Past work has referenced self-transcendence as a potential source of many factors that help people endure suffering (e.g., meaning, problem-focused coping) (Frankl, 1946/1992; Matthews and Cook, 2009; Eisenbeck et al., 2021; Sanchez-Ruiz et al., 2021; Avsec et al., 2022; Eisenbeck et al., 2022). By specifying the affective, cognitive, and motivational mechanisms through which self-transcendence helps the endurance of suffering, our work sharpens the precision of past theoretical models and allows us to more effectively assess the beneficial effects of self-transcendence through quantitative and qualitative research. The story of Gilgamesh (ca. 2,750–2,500 B.C.E./2003) culminates in the king attaining a level of peace upon looking out over his city walls and recognizing his contribution to the happiness of his people. With our theoretical framework for the functions of

self-transcendence, we hope to elucidate how the people of modernity may likewise endure and transcend the inevitable suffering in life by transcending the self.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding authors.

Author contributions

BG and FY conceived the ideas and revised the manuscript. BG wrote the initial draft. All authors contributed to the article and approved the submitted version.

Acknowledgments

We would like to acknowledge Dr. Paul Wong for his inputs on the outline of the draft, as well as members of the *Human Nature and Potentials Lab* for their feedback on the manuscript.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

References

- Al-Kandari, S., Alsalem, A., Abohaimed, S., Al-Orf, F., Al-Zoubi, M., Al-Sabah, R., et al. (2017). Brief report: Social support and coping strategies of mothers of children suffering from ASD in Kuwait. *J. Autism Dev. Disord.* 47, 3311–3319. doi: 10.1007/s10803-017-3225-y
- Avsec, A., Eisenbeck, N., Carreno, D. F., Kocjan, G. Z., and Kavčič, T. (2022). Coping styles mediate the association between psychological inflexibility and psychological functioning during the COVID-19 pandemic: A crucial role of meaning-centered coping. *J. Contextual Behav. Sci.* 26, 201–209. doi: 10.1016/j.jcbs.2022.10.001
- Baumeister, R. F. (1990). Suicide as escape from self. *Psychol. Rev.* 97:90. doi: 10.1037/0033-295X.97.1.90
- Benatar, D. (2008). *Better never to have been: The harm of coming into existence*. Oxford, UK: Oxford University Press.
- Block, S. D. (2001). Psychological considerations, growth, and transcendence at the end of life: The art of the possible. *JAMA* 285, 2898–2905. doi: 10.1001/jama.285.22.2898
- Bloom, P. (2021). *The sweet spot: The pleasure of suffering and the search for meaning*. New York, NY: ECCO.
- Bojanowska, A., and Kaczmarek, L. D. (2022). How healthy and unhealthy values predict hedonic and eudaimonic well-being: Dissecting value-related beliefs and behaviors. *J. Happiness Stud.* 23, 211–231. doi: 10.1007/s10902-021-00396-z
- Brady, M. (2021). Precise of suffering and virtue. *J. Value Inq.* 55, 567–569. doi: 10.1007/s10790-021-09862-6
- Calhoun, L. G. (2013a). "Creating a narrative with post traumatic growth domains" in *Posttraumatic growth in clinical practice*. eds. L. G. Calhoun and R. G. Tedeschi (New York, NY: Routledge/Taylor & Francis), 102–118.
- Calhoun, L. G. (2013b). "Emotional regulation and posttraumatic growth" in *Posttraumatic growth in clinical practice*. eds. L. G. Calhoun and R. G. Tedeschi (New York, NY: Routledge/Taylor & Francis), 69–85.
- Calhoun, L. G. (2013c). "Existential, religious, and spiritual growth" in *Posttraumatic growth in clinical practice*. eds. L. G. Calhoun and R. G. Tedeschi (New York, NY: Routledge/Taylor & Francis), 119–137.
- Carver, C. S., and Connor-Smith, J. (2010). Personality and coping. *Annu. Rev. Psychol.* 61, 679–704. doi: 10.1146/annurev.psych.093008.100352
- Castelo, N., White, K., and Goode, M. R. (2021). Nature promotes self-transcendence and prosocial behavior. *J. Environ. Psychol.* 76:101639. doi: 10.1016/j.jenvp.2021.101639
- Courtois, C. A. (2017). "Meaning making and trauma recovery," in *Reconstructing Meaning After Trauma*. ed. E. M. Altmaier (Cambridge, MA: Academic Press), 187–192.

- Croom, A. M. (2015). Music practice and participation for psychological well-being: A review of how music influences positive emotion, engagement, relationships, meaning, and accomplishment. *Music. Sci.* 19, 44–64. doi: 10.1177/1029864914561709
- Dangel, T. J., Webb, J. R., and Hirsch, J. K. (2018). Forgiveness and suicidal behavior: Cynicism and psychache as serial mediators. *J. Psychol.* 152, 77–95. doi: 10.1080/00223980.2017.1408555
- Eisenbeck, N., Carreno, D. F., and Pérez-Escobar, J. A. (2021). Meaning-centered coping in the era of COVID-19: Direct and moderating effects on depression, anxiety, and stress. *Front. Psychol.* 12:648383. doi: 10.3389/fpsyg.2021.648383
- Eisenbeck, N., Carreno, D. F., Wong, P. T., Hicks, J. A., Maria, R. G., Puga, J. L., et al. (2022). An international study on psychological coping during COVID-19: Towards a meaning-centered coping style. *Int. J. Clin. Health Psychol.* 22:100256. doi: 10.1016/j.ijchp.2021.100256
- Enright, R. D., Wang Xu, J., Rapp, H., Evans, M., and Song, J. Y. (2022). The philosophy and social science of agape love. *J. Theor. Philos. Psychol.* 42, 220–237. doi: 10.1037/teo0000202
- Forsythe, J. E. (2021). *The existential nihilism scale (ENS): Theory, development, and psychometric evaluation* Unpublished Master's thesis York University.
- Frankl, V.E. (1946/1992). *Man's search for meaning: An introduction to Logotherapy*. Boston, MA: Beacon Press.
- Freh, F. M., Dallos, R., and Chung, M. C. (2013). An exploration of PTSD and coping strategies: Response to the experience of being in a bomb attack in Iraq. *Traumatology* 19, 87–94. doi: 10.1177/1534765612444882
- Frounfelker, R. L., Mishra, T., Dhesi, S., Gautam, B., Adhikari, N., and Betancourt, T. S. (2020). “We are all under the same roof”: Coping and meaning-making among older Bhutanese with a refugee life experience. *Soc. Sci. Med.* 264:113311. doi: 10.1016/j.socscimed.2020.113311
- Frumkin, M. R., Robinaugh, D. J., LeBlanc, N. J., Ahmad, Z., Bui, E., Nock, M. K., et al. (2021). The pain of grief: Exploring the concept of psychological pain and its relation to complicated grief, depression, and risk for suicide in bereaved adults. *J. Clin. Psychol.* 77, 254–267. doi: 10.1002/jclp.23024
- Fu, X., Sun, J., Wang, X., Cui, M., and Zhang, Q. (2022). Research progress on influencing factors and intervention measures of post-traumatic growth in breast cancer patients. *Front. Public Health* 10:927370. doi: 10.3389/fpubh.2022.927370
- Gan, Y., Guo, M., and Tong, J. (2013). Scale development of meaning-focused coping. *J. Loss Trauma* 18, 10–26. doi: 10.1080/15325024.2012.678780
- Gan, Y., Zheng, L., Wang, Y., and Li, W. (2018). An extension of the meaning making model using data from Chinese cancer patients: The moderating effect of resilience. *Psychol. Trauma Theory Res. Pract. Policy* 10, 594–601. doi: 10.1037/tra0000325
- Garcia-Romeu, A. (2010). Self-transcendence as a measurable transpersonal construct. *J. Transpers. Psychol.* 42:26.
- Gerrish, N. J., and Bailey, S. (2020). Maternal grief: A qualitative investigation of mothers' responses to the death of a child from cancer. *J. Death Dying* 81, 197–241. doi: 10.1177/0030222818762190
- Gerrish, N. J., Neimeyer, R. A., and Bailey, S. (2014). Exploring maternal grief: A mixed-methods investigation of mothers' responses to the death of a child from cancer. *J. Constr. Psychol.* 27, 151–173. doi: 10.1080/10720537.2014.904700
- Giuntoli, L., Condini, F., Ceccarini, F., Huta, V., and Vidotto, G. (2021). The different roles of hedonic and eudaimonic motives for activities in predicting functioning and well-being experiences. *J. Happiness Stud.* 22, 1657–1671. doi: 10.1007/s10902-020-00290-0
- Gruszczynska, E., and Knoll, N. (2015). Meaning-focused coping, pain, and affect: A diary study of hospitalized women with rheumatoid arthritis. *Qual. Life Res.* 24, 2873–2883. doi: 10.1007/s11136-015-1031-6
- Hanley, A. W., Dorjee, D., and Garland, E. L. (2020). Mindfulness training encourages self-transcendent states via decentering. *Psychol. Conscious. Theory Res. Pract.* Advance online publication. doi: 10.1037/cns0000262
- Hoang, T. M., Shin, L. J., Xu, S., and Lu, Q. (2020). Coping with breast cancer among immigrant Chinese Americans. *Asian Am. J. Psychol.* 11, 108–116. doi: 10.1037/aap0000175
- Hood, R. W. (1975). The construction and preliminary validation of a measure of reported mystical experience. *J. Sci. Study Relig.* 14, 29–41. doi: 10.2307/1384454
- Huang, M., and Yang, F. (2022). Self-transcendence or self-enhancement: People's perceptions of meaning and happiness in relation to the self. *J. Exp. Psychol. Gen.* 152, 590–610. doi: 10.1037/xge0001297
- Kauppinen, A. (2019). “The world according to suffering,” in *Philosophy of Suffering*. eds. D. Bain, M. Brady and J. Corns (Oxfordshire, UK: Routledge), 19–36.
- Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. *J. Health Soc. Behav.* 43:207. doi: 10.2307/3090197
- Kim, J., Holte, P., Martela, F., Shanahan, C., Li, Z., Zhang, H., et al. (2022). Experiential appreciation as a pathway to meaning in life. *Nat. Hum. Behav.* 6, 677–690. doi: 10.1038/s41562-021-01283-6
- Kim, B., Kim, J., Moon, S. S., Yoon, S., and Wolfer, T. (2021). Korean women's marital distress and coping strategies in the early stage of intercultural marriages. *J. Ethn. Cult. Divers. Soc. Work* 30, 523–541. doi: 10.1080/15313204.2020.1753616
- Kim, Y., Nusbaum, H., and Yang, F. (in press). Going beyond ourselves: The role of self-transcendent experiences in wisdom. *Cognit. Emot.* doi: 10.31234/osf.io/dpjjx
- Kitson, A., Chirico, A., Gaggioli, A., and Riecke, B. E. (2020). A review on research and evaluation methods for investigating self-transcendence. *Front. Psychol.* 11:547687. doi: 10.3389/fpsyg.2020.547687
- Klein, K. (2017). Prosocial behavior increases perceptions of meaning in life. *J. Posit. Psychol.* 12, 354–361. doi: 10.1080/17439760.2016.1209541
- Koltko-Rivera, M. E. (2004). The psychology of worldviews. *Rev. Gen. Psychol.* 8, 3–58. doi: 10.1037/1089-2680.8.1.3
- Krause, N., and Bastida, E. (2011). Religion, suffering, and self-rated health among older Mexican Americans. *J. Gerontol. B Psychol. Sci. Soc. Sci.* 66, 207–216. doi: 10.1093/geronb/gbq086
- Kreitzer, M. J., Gross, C. R., Waleekhachonloet, O. A., Reilly-Spong, M., and Byrd, M. (2009). The brief serenity scale: A psychometric analysis of a measure of spirituality and well-being. *J. Holist. Nurs.* 27, 7–16. doi: 10.1177/0898010108327212
- Lavy, S., and Benish-Weisman, M. (2021). Character strengths as “values in action”: Linking character strengths with values theory—an exploratory study of the case of gratitude and self-transcendence. *Front. Psychol.* 12:576189. doi: 10.3389/fpsyg.2021.576189
- Lewis, K. C., Good, E. W., Tillman, J. G., and Hopwood, C. J. (2021). Assessment of psychological pain in clinical and non-clinical samples: A preliminary investigation using the psychic pain scale. *Arch. Suicide Res.* 25, 552–569. doi: 10.1080/13811118.2020.1729914
- Liu, P., Zhou, S., Cui, L., Cai, D., and Li, D. (2022). Why does one want to feel socially engaging emotions? The role of self-transcendence values on desired emotions among adolescents. *Personal. Individ. Differ.* 185:111257. doi: 10.1016/j.paid.2021.111257
- Magyar-Russell, G., Pargament, K. I., Grubbs, J. B., Wilt, J. A., and Exline, J. J. (2022). The experience of sacred moments and mental health benefits over time. *Psychol. Relig. Spiritual.* 14, 161–169. doi: 10.1037/rel0000394
- Martela, F., and Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *J. Posit. Psychol.* 11, 531–545. doi: 10.1080/17439760.2015.1137623
- Matthews, E. E., and Cook, P. F. (2009). Relationships among optimism, well-being, self-transcendence, coping, and social support in women during treatment for breast cancer. *Psychooncology* 18, 716–726. doi: 10.1002/pon.1461
- McAdams, D. P., and Jones, B. K. (2017). “Making meaning in the wake of trauma: Resilience and redemption,” in *Reconstructing Meaning After Trauma*. ed. E. M. Altmaier (Cambridge, MA: Academic Press), 3–16.
- McClelland, T. (2019). “The disruption model of suffering,” in *Philosophy of Suffering*. eds. D. Bain, M. Brady and J. Corns (Oxfordshire, UK: Routledge), 37–54.
- Milman, E., Lee, S. A., Neimeyer, R. A., Mathis, A. A., and Jobe, M. C. (2020). Modeling pandemic depression and anxiety: The mediational role of core beliefs and meaning making. *J. Affect. Disord. Rep.* 2:100023. doi: 10.1016/j.jadr.2020.100023
- Monroy, M., and Keltner, D. (2022). Awe as a pathway to mental and physical health. *Perspect. Psychol. Sci.* 17:56916221094856. doi: 10.1177/17456916221094856
- Montemaggi, F. E. S. (2017). Religion as self-transcendence. A Simmelian framework for authenticity. *Simmel Stud.* 21, 89–114. doi: 10.7202/1041338ar
- Moss, H. (2019). Music therapy, spirituality and transcendence. *Nord. J. Music. Ther.* 28, 212–223. doi: 10.1080/08098131.2018.1533573
- Nakamura, J., and Csikszentmihalyi, M. (2002). “The concept of flow” in *Handbook of positive psychology*. eds. C. R. Snyder and S. J. Lopez (Oxford, UK: Oxford University Press), 89–105.
- Nierenberg, A. A., Ghaemi, S. N., Clancy-Colecchi, K., Rosenbaum, J. F., and Fava, M. (1996). Cynicism, hostility, and suicidal ideation in depressed outpatients. *J. Nerv. Ment. Dis.* 184, 607–610. doi: 10.1097/00005053-199610000-00004
- Ozawa-de Silva, B. R., Dodson-Lavelle, B., Raison, C. L., Negi, L. T., Silva, B. R. O., and Phil, D. (2012). Compassion and ethics: Scientific and practical approaches to the cultivation of compassion as a foundation for ethical subjectivity and well-being. *J. Healthcare Sci. Human.* 2, 145–161.
- Pak, C. (2019). The downside risk of failing to transcend extraordinarily negative experiences: A narrative analysis. *Mil. Med.* 184, e110–e117. doi: 10.1093/milmed/usy155
- Papa, A., Sewell, M. T., Garrison-Diehn, C., and Rummel, C. (2013). A randomized open trial assessing the feasibility of behavioral activation for pathological grief responding. *Behav. Ther.* 44, 639–650. doi: 10.1016/j.beth.2013.04.009
- Park, C. L. (2008). Testing the meaning making model of coping with loss. *J. Soc. Clin. Psychol.* 27, 970–994. doi: 10.1521/jscp.2008.27.9.970
- Park, C. L. (2020). “Religiousness and meaning making following stressful life events,” in *The science of religion, spirituality, and existentialism*. eds. K. E. Vail III and C. Routledge (Cambridge, MA: Academic Press), 273–285.
- Park, C. L., and Gutierrez, I. A. (2013). Global and situational meanings in the context of trauma: Relations with psychological well-being. *Couns. Psychol. Q.* 26, 8–25. doi: 10.1080/09515070.2012.727547

- Park, C. L., and Kennedy, M. C. (2017). "Meaning violation and restoration following trauma: Conceptual overview and clinical implications," in *Reconstruct. Mean. Trauma*. ed. E. M. Altmaier (Academic Press), 17–27.
- Park, C. L., Mills, M. A., and Edmondson, D. (2012). PTSD as meaning violation: Testing a cognitive worldview perspective. *Psychol. Trauma Theory Res. Pract. Policy* 4, 66–73. doi: 10.1037/a0018792
- Perlin, J. D., and Li, L. (2020). Why does awe have prosocial effects? New perspectives on awe and the small self. *Perspect. Psychol. Sci.* 15, 291–308. doi: 10.1177/1745691619886006
- Piff, P. K., Dietze, P., Feinberg, M., Stancato, D. M., and Keltner, D. (2015). Awe, the small self, and prosocial behavior. *J. Pers. Soc. Psychol.* 108:883. doi: 10.1037/pspi0000018
- Pompili, M., Innamorati, M., Serafini, G., Gonda, X., Campi, S., Rapinesi, C., et al. (2012). How does subjective experience of pain relate to psychopathology among psychiatric patients? *Gen. Hosp. Psychiatry* 34, 534–540. doi: 10.1016/j.genhosppsych.2012.03.022
- Reynolds, F., and Prior, S. (2006). Creative adventures and flow in art-making: A qualitative study of women living with cancer. *Br. J. Occup. Ther.* 69, 255–262. doi: 10.1177/03080226060900603
- Rivera, G. N., Vess, M., Hicks, J. A., and Routledge, C. (2020). Awe and meaning: Elucidating complex effects of awe experiences on meaning in life. *Eur. J. Soc. Psychol.* 50, 392–405. doi: 10.1002/ejsp.2604
- Sanchez-Ruiz, M. J., Tadros, N., Khalaf, T., Ego, V., Eisenbeck, N., Carreno, D. F., et al. (2021). Trait emotional intelligence and wellbeing during the pandemic: The mediating role of meaning-centered coping. *Front. Psychol.* 12:648401. doi: 10.3389/fpsyg.2021.648401
- Schopenhauer, A. (2020). *On the suffering of the world*. London, United Kingdom: Repeater Books, an imprint of Watkins Media.
- Shear, M. K. (2015). Complicated grief. *N. Engl. J. Med.* 372, 153–160. doi: 10.1056/NEJMc1315618
- Shear, M. K., Wang, Y., Skritskaya, N., Duan, N., Mauro, C., and Ghesquiere, A. (2014). Treatment of complicated grief in elderly persons: A randomized clinical trial. *JAMA Psychiat.* 71, 1287–1295. doi: 10.1001/jamapsychiatry.2014.1242
- Sorensen, T., and Lien, L. (2022). Significance of self-transcendence for rehabilitation and relapse prevention among patients with substance use disorder: A qualitative study. *Religions* 13:491. doi: 10.3390/rel13060491
- Stallard, P., Velleman, R., Langsford, J., and Baldwin, S. (2001). Coping and psychological distress in children involved in road traffic accidents. *Br. J. Clin. Psychol.* 40, 197–208. doi: 10.1348/014466501163643
- Steger, M. F., Owens, G. P., and Park, C. L. (2015). Violations of war: Testing the meaning-making model among Vietnam veterans. *J. Clin. Psychol.* 71, 105–116. doi: 10.1002/jclp.22121
- Stellar, J. E., Gordon, A., Anderson, C. L., Piff, P. K., McNeil, G. D., and Keltner, D. (2018). Awe and humility. *J. Pers. Soc. Psychol.* 114, 258–269. doi: 10.1037/pspi0000109
- Stellar, J. E., Gordon, A. M., Piff, P. K., Cordaro, D., Anderson, C. L., Bai, Y., et al. (2017). Self-transcendent emotions and their social functions: Compassion, gratitude, and awe bind us to others through prosociality. *Emot. Rev.* 9, 200–207. doi: 10.1177/1754073916684557
- Stilwell, P., Hudon, A., Meldrum, K., Pagé, M. G., and Wideman, T. H. (2022). What is pain-related suffering? Conceptual critiques, key attributes, and outstanding questions. *J. Pain* 23, 729–738. doi: 10.1016/j.jpain.2021.11.005
- Svenaesus, F. (2020). To die well: The phenomenology of suffering and end of life ethics. *Med. Health Care Philos.* 23, 335–342. doi: 10.1007/s11019-019-09914-6
- Swann, W. B. Jr., and Buhrmester, M. D. (2015). Identity fusion. *Curr. Dir. Psychol. Sci.* 24, 52–57. doi: 10.1177/0963721414551363
- Taghizadeh, Z., Ebadi, A., Dehghani, M., Gharacheh, M., and Yadollahi, P. (2017). A time for psycho-spiritual transcendence: The experiences of Iranian women of pain during childbirth. *Women Birth* 30, 491–496. doi: 10.1016/j.wombi.2017.04.010
- The Epic of Gilgamesh (2003). *The Epic of Gilgamesh*, A. George, Trans Penguin Classics Original work published ca. 2750–2500 B.C.E.
- Van de Goor, J., Sools, A. M., and Westerhof, G. J. (2020). The emergence of meaning from meaningful moments in life. *J. Humanist. Psychol.* 22167820967779: 002216782096777. doi: 10.1177/0022167820967779
- Van der Heyden, K., Dezutter, J., and Beyers, W. (2015). Meaning in life and depressive symptoms: A person-oriented approach in residential and community-dwelling older adults. *Aging Ment. Health* 19, 1063–1070. doi: 10.1080/13607863.2014.995589
- Vanden Bos, G. R. (2007). *APA dictionary of psychology*. Washington, DC: American Psychological Association.
- VanderWeele, T. J. (2019). Suffering and response: Directions in empirical research. *Soc. Sci. Med.* 224, 58–66. doi: 10.1016/j.socscimed.2019.01.041
- Wachholtz, A. B., Fitch, C. E., Makowski, S., and Tjia, J. (2016). A comprehensive approach to the patient at end of life: Assessment of multidimensional suffering. *South. Med. J.* 109, 200–206. doi: 10.14423/SMJ.0000000000000439
- Wong, P. T. (ed.) (2013). "Toward a dual-systems model of what makes life worth living," in *The Human Quest for Meaning* (Oxfordshire, UK: Routledge), 49–68.
- Wong, P. T. (2019). Second wave positive psychology's (PP 2.0) contribution to counseling psychology. *Couns. Psychol. Q.* 32, 275–284. doi: 10.1080/09515070.2019.1671320
- Wong, P. T., Arslan, G., Bowers, V. L., Peacock, E. J., Kjell, O. N. E., Ivtzan, I., et al. (2021). Self-transcendence as a buffer against COVID-19 suffering: The development and validation of the self-transcendence measure-B. *Front. Psychol.* 12:648549. doi: 10.3389/fpsyg.2021.648549
- Xie, J. Q., Zhang, H., Zhang, X., Yin, M. Z., Yang, J., Chen, K., et al. (2022). The mediating role of personal values between COVID-19-related posttraumatic growth and life satisfaction among Chinese college students: A two-wave longitudinal study. *Front. Psychol.* 13:926375. doi: 10.3389/fpsyg.2022.926375
- Yaden, D. B., Haidt, J., Hood, R. W. Jr., Vago, D. R., and Newberg, A. B. (2017). The varieties of self-transcendent experience. *Rev. Gen. Psychol.* 21, 143–160. doi: 10.1037/gpr0000102
- Young, K. S., Sandman, C. F., and Craske, M. G. (2019). Positive and negative emotion regulation in adolescence: Links to anxiety and depression. *Brain Sci.* 9:76. doi: 10.3390/brainsci9040076
- Zhang, B., El-Jawahri, A., and Prigerson, H. G. (2006). Update on bereavement research: Evidence-based guidelines for the diagnosis and treatment of complicated bereavement. *J. Palliat. Med.* 9, 1188–1203. doi: 10.1089/jpm.2006.9.1188
- Zhao, H., Zhang, H., Xu, Y., He, W., and Lu, J. (2019). Why are people high in dispositional awe happier? The roles of meaning in life and materialism. *Front. Psychol.* 10:1208. doi: 10.3389/fpsyg.2019.01208