

# Opponent Process Theory Can Help Explain Some Effects of Resilience

Nathan A. Bowling  
*Wright State University*

Terry A. Beehr  
*Central Michigan University*

We read the focal article by Britt, Shen, Sinclair, Grossman, and Klieger (2016) with special interest. About 10 years ago, we were asked to write a chapter on hardiness (Beehr & Bowling, 2005), and in doing so we had many observations about hardiness that were similar to Britt et al.'s observations about resilience. Our chapter was most closely aligned with the "capacity" concept of resilience, but we think that both the "capacity" approach and the "demonstration" approach to resilience have merit.

## Opponent Process Theory and the Dynamic Processes Underlying Employee Resilience

In this commentary, we argue that opponent process theory (Landy, 1978; Solomon, 1980; Solomon & Corbit, 1974) provides a conceptual foundation for understanding employee resilience. In making this argument, we build on Britt et al.'s focal article in three ways. First, opponent process theory addresses the mechanisms that explain employees' adaptive responses over time to work-related adversity. Second, opponent process theory provides a means of integrating the two approaches to resilience discussed by Britt et al.—the capacity approach and the demonstration approach. Finally, opponent process theory provides insights that could guide organizational efforts to build employee resilience. Our commentary, therefore, is meant to extend rather than challenge the Britt et al. focal article. Before discussing these points, however, we first provide a brief overview of opponent process theory.

### Overview of Opponent Process Theory

Opponent process theory (Landy, 1978; Solomon, 1980; Solomon & Corbit, 1974) describes the mechanisms governing a person's adaptive responses to affect-evoking stimuli, which include such stimuli as adverse work-related

Nathan A. Bowling, Department of Psychology, Wright State University; Terry A. Beehr, Department of Psychology, Central Michigan University.

Correspondence concerning this article should be addressed to Nathan A. Bowling, Department of Psychology, Wright State University, 303C Fawcett Hall, 3640 Colonel Glenn Highway, Dayton, OH 45435-0001. E-mail: [nathan.bowling@wright.edu](mailto:nathan.bowling@wright.edu)

events. The function of these mechanisms is to help the person maintain affective homeostasis. According to opponent process theory, the introduction of a stimulus produces an automatic response—the primary process. The primary process aligns with the nature of the stimulus: Positive stimuli elicit positively valenced primary processes; negative stimuli elicit negatively valenced primary processes. A competing process—the opponent process—becomes activated whenever the magnitude of the primary process surpasses a hypothetical threshold. The opponent process has the opposite valence from the primary process. As a result, the activation of the opponent process either partially or completely negates the primary process, thus causing the person to return to an affective state that more closely resembles his or her set point. Thus the average person should show some resilience in the sense of demonstrating a favorable postadversity resilience trajectory.

Opponent process theory has been used to explain research findings from a variety of domains, including affect changes in relation to self-injury (e.g., Hamza & Willoughby, 2015), affect in relation to physical exercise (e.g., Markowitz & Arendt, 2010), and pain relief (e.g., Leknes, Brookes, Wiech, & Tracy, 2008). Given that opponent process theory addresses fundamental biological mechanisms, it is applicable across various types of stimuli. By extension, opponent process theory is thus relevant to the class of stimuli discussed by Britt et al.: work-related adversity.

To illustrate the application of opponent process theory to work-related adversity, consider the example of a bank teller who is the victim of an armed robbery. Prior to the robbery, the teller is likely to experience an affective state that is at or near his or her set point. Once the robbery begins, however, the teller is likely to experience immediate negative affect—in this case, extreme anxiety. This immediate response is the primary process. If this primary process surpasses the teller's hypothetical threshold, then an opponent process—a positively valenced response—is activated. The activation of the opponent process lessens the teller's anxiety, thus helping him or her maintain affective homeostasis.

After the robbery ends, there may be an “overshoot” in the sense that the teller may temporarily reach a more positive affective state than his or her set point (see Landy, 1978; Solomon, 1980; Solomon & Corbit, 1974). This overshoot occurs because the opponent process is slow to decay. Thus, the opponent process remains temporally activated even after the stimulus has been removed and the primary process has decayed. If a researcher were to measure affective strain at this point in time, a conclusion that posttraumatic growth had occurred might seem logical. Note, however, that at a later time, the teller is likely to return to his or her affective set point. This reinforces Britt et al.'s emphasis on the need for longitudi-

nal research in order to determine the full pattern of a person's resilience trajectory.

### **The Mechanism Underlying Employee Adaptation to Work-Related Adversity**

One contribution of opponent process theory is that it is based on basic biological mechanisms underlying employees' adaptive responses to work-related adversity. Simply put, the opponent process is proposed as a mechanism that negates the undesirable effects of work-related adversity. But what, exactly, is the opponent process? Opponent processes may be conceptualized as emotional, cognitive, hormonal, or neural (Landy, 1978; Solomon, 1980) and much of the research on it examines biological processes.

### **Integrating the Capacity and Demonstration Approaches to Resilience**

In its original form, opponent process theory sought to describe mechanisms that are uniform across people. More recently, however, Bowling, Beehr, Wagner, and Libkuman (2005) theorized that people might differ from each other in how the components of opponent process theory operate. Specifically, they suggested that personality traits influence (a) the location of one's set point, (b) the strength of one's primary process, (c) the location of one's hypothetical threshold, and (d) the strength of one's opponent process. This might explain why there is between-person variation in employees' responses to adversity even if adaptation patterns are largely similar. The proposal that traits influence these elements of opponent processes is consistent with Britt et al.'s capacity approach to resilience.

Although Bowling et al. focused their discussion on one aspect of employee well-being—job satisfaction—their arguments have implications for improving researchers' understanding of other employee responses to work-related adversity, especially other affective responses (e.g., including affective strains). More specifically, their theorizing provides a framework for integrating the capacity approach with the demonstration approach to employee resilience.

To illustrate how Bowling et al.'s theorizing provides this integrative framework, consider the potential relationships between emotional stability—a five-factor model trait that figures prominently within the capacity approach to resilience—and the components of opponent process theory. Drawing from Bowling et al., we expect emotionally stable employees to differ from emotionally unstable employees in several important ways. Specifically, we expect emotionally stable employees to have (a) relatively higher set-point levels of well-being, (b) relatively weaker primary processes in response to adversity, (c) relatively lower hypothetical thresholds, and (d) relatively stronger opponent processes.

As a net result of these individual differences in the opponent process components, we expect emotionally stable employees to demonstrate resilience trajectories that differ from those of emotionally unstable employees. That is, we predict that emotionally stable employees will display (a) higher levels of preadversity well-being, (b) smaller postadversity decrements in well-being, and (c) faster and more complete returns to preadversity levels of well-being following the removal of the adverse event.

### **Building Employee Resilience**

According to opponent process theory, the opponent process grows stronger with use and weaker with disuse (Landy, 1978; Solomon, 1980; Solomon & Corbit, 1974). This idea has important practical implications that could guide organizational efforts to build employee resilience. That is, exposing employees to planned, distributed instances of adversity—similar to stress inoculation (Meichenbaum, 2007)—is expected to strengthen the opponent process. A strengthened opponent process, in turn, would help employees adapt more quickly and more fully to work-related adversity.

Such planned exposure sessions would be particularly beneficial for employees working in occupations where adversity is a possibility but in fact occurs only rarely. For these employees, the job provides few inherent opportunities to develop a strong opponent process; thus, these employees may not have much on-the-job opportunity to build resilience, and they may display poor resilience when work-related adversity does arise. Within this context, planned exposure sessions could help compensate for the lack of naturally occurring adversity.

### **Conclusion**

We have argued that opponent process theory provides a framework for understanding employee resilience. In this concluding section, we briefly discuss a few remaining points. First, if the mechanism described by opponent process theory is a basic biological process existing to some degree within all people, then most employees can be expected to successfully adapt to work-related adversity. This is true in other domains of adversity, such as when most people who experience trauma that is more extreme than typical work-related adversities generally adapt successfully (for a review of research on peoples' responses to traumatic events, see Bonanno, 2004). We likewise expect that the majority of employees would adapt effectively on their own.

Second, opponent process theory might apply more to work-related adversity's relationships with certain health criteria than with other criteria. Opponent process theory directly addresses affect; thus, it may be more relevant to employees' emotional strains (e.g., anxiety, depression, and burnout)

than to other health criteria, such as physical and behavioral strains. It may be even less relevant to job performance.

Finally, the chain of mechanisms described by opponent process theory might only be activated by serious stressors. Minor stressors, in other words, may elicit primary processes that are too weak to surpass the person's hypothetical threshold. As a result, exposure to a minor stressor may not produce an opponent process; thus the person's adaptive response would not occur in the way described by opponent process theory. This makes opponent process theory particularly suitable for describing how employees adapt to major stressors, such as significant work-related adversities. This is relevant because the Britt et al. resilience model is explicitly concerned with workers' responses to *significant* adversity (see Figure 1 in the focal article) rather than to the more commonly studied, more chronic, but lower-intensity work stressors.

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