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## Leader Development for Dangerous Contexts

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## CHAPTER 19

# Leader Development for Dangerous Contexts

Noel F. Palmer, Sean T. Hannah, and Daniel E. Sosnowik

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Looking back, it was almost funny how we were all detached emotionally from the emergency we were responding to. Our marked police van, with its lights and sirens blaring, was racing down the center lane of the FDR Drive. We, the officers inside, were trying to consider what type of stupendous pilot error landed an aircraft into the WTC tower. As the van screeched to a halt near the site, our “therapy”—or was it avoidance—of nervously joking about the incident ended quickly as the severity of the event became apparent. Now, it wasn’t just one tower burning, it was two. People were running scared; the NYPD radio was filled with a mixture of orders, screams, and confusion; and the towers in the distance had small items dripping off their sides, like drops of glue out of a bottle. One officer cleared his throat and said what we already knew: “Holy shit, those are people jumping out of the windows!”

I quickly lost all sense of time and purpose; I think we all did. Our sergeant offered the one and only instruction of that day: “Everyone stay together.” What else could she say? Each of us was trying to remember the ride in the van. . . . Did we talk tactics? Did we have an emergency response plan for this, an obvious terrorist attack? Or should we just go on a quick search and rescue mission, a mission for which we really didn’t have enough training either? It didn’t matter in the end; just a few minutes after our arrival, the majestic south tower collapsed. The memory of civilians scampering for their lives, humans seeking cover in any nook and cranny available, dust and debris filling the air and our lungs, was a sure indication that if there was a hell on earth, we were in it at that moment.

—Officer Walsh, New York City Police Department,  
assigned to respond to the World Trade Center, September 11, 2001

Research of human behavior in organizations has for the most part been decontextualized.<sup>1</sup> As a result, behavior is generally understood, but without an adequate grasp of the various social and situational contingencies that affect it. Further, scholars point to a similar, limited understanding of the contextualization of leadership in organizations, both generally and more specifically in military and other extreme contexts.<sup>2</sup> Yet, as made clear in the opening epigraph, extreme contexts may include extensive contingencies that influence leadership processes, such as the presence of fear, complexity, moral challenges, and mental and physical fatigue.

Understanding effective leadership for dangerous contexts requires a focus on context-specific factors and the integration of context into models of leader and leadership development.<sup>3</sup> Creating an integrated leader development framework for dangerous contexts should accomplish three goals: clarify the demands placed upon leaders; explain the capacities that need to be developed so that leaders can adapt well to demands and changes in situations and circumstances; and recognize that the demands on leaders differ across the phases of dangerous contexts.<sup>4</sup> Thus, a framework is suggested here that recognizes the importance of development through three phases of dangerous contexts: (1) anticipation of involvement in a dangerous context; (2) effective functioning in situ (e.g., during dangerous contexts); and (3) post hoc functioning, which addresses outcomes of involvement in dangerous contexts (see Figure 19.1). This framework was chosen in part because it aligns with theories of stress and coping, where stressful encounters are recognized as a “dynamic, unfolding process, not as a static, unitary event.”<sup>5</sup> This taxonomy allows leader developers to recognize that the requirements on leaders may differ substantively across the phases of dangerous contexts.

## DEFINING DANGEROUS CONTEXTS

An underlying assumption in this chapter is that when confronting danger such as that experienced by the New York City police and fire departments on September 11, 2001, leadership is uniquely contextualized or distinct from that in non-dangerous contexts. Hannah and colleagues, in their typology of leadership in extreme contexts, suggest that “unique factors influence leadership in important ways depending on where and when it is occurring relevant to the extreme event and context, and across periods before, during, or after an extreme event.”<sup>6</sup>

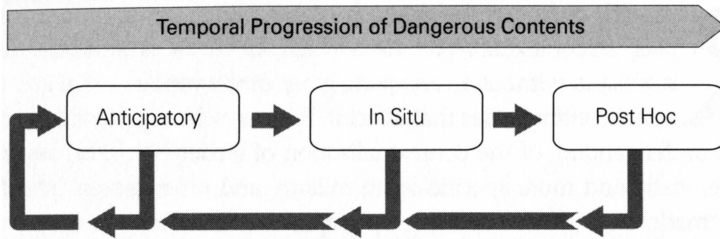


FIGURE 19.1 Cyclical phases of leadership in dangerous contexts

Hannah and colleagues also delineated five dimensions across which dangerous contexts vary: location in time (pre, in situ, post hoc), potential magnitude of consequences, probability event may occur, proximity or closeness, and the form of threat (e.g., physical or property loss).<sup>7</sup> These factors combine in a myriad of ways to create variable inputs into the overall level of danger experienced and the responses of leaders and followers.

### DEFINING LEADER AND LEADERSHIP DEVELOPMENT FOR DANGEROUS CONTEXTS

Learning is defined as “an increase or change in knowledge or skill that occurs as a result of some experience,” whereas “development is an ongoing, longer-term change or evolution that occurs through many learning experiences.”<sup>8</sup> An important discussion for leadership researchers has been one of distinguishing between leader and leadership development. Leader development is a process that builds competencies to make individual leaders more effective, while leadership development is a process that expands “collective capacity of organizational members to engage effectively in leadership roles and processes.”<sup>9</sup>

In dangerous contexts, leaders require the capacity to meet certain objectives under conditions of danger. The discussion here takes a more cognitive and affective, process-oriented approach and outlines the individual capacities that need to be developed in leaders for successful functioning in dangerous contexts. Further, it is suggested that leadership is an influence process that draws from a highly developed organizational context to foster positive interactions within and across individuals and groups and within a dynamic external environment.<sup>10</sup> Extending this to dangerous contexts, the following definition of leadership in extreme contexts is used: “Adaptive and administrative processes of influencing others to understand and agree about what

needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives and purpose under conditions where an extensive and intolerable magnitude of physical, psychological, or material consequences may. . . occur.”<sup>11</sup>

Combining the definition of development presented above with this definition of leadership in extreme contexts, it is suggested that leadership development for dangerous contexts be defined as a process that builds individual and collective capacities and the organizational systems and context to foster adaptive response across phases of preparation for, function during, and post hoc recovery from dangerous contexts. This definition accentuates that the demands of leadership vary across cycles of dangerous events, requiring different developed capacities. Targets of development must provide social, psychological, and organizational resources for managing coping under stress and enabling successful adaptation to extreme and volatile conditions that then foster mitigation of harm, successful post hoc restorative processes, and the development and maintenance of organizational systems that support these objectives and related socialization processes.

## TARGETS OF DEVELOPMENT FOR DANGEROUS CONTEXTS

A number of recent reviews of leadership development have endeavored to create integrative models of the development process. These reviews in aggregate provide a sense of the developmental targets most commonly cited as important for leader development (see Table 19.1). In reviewing these theories, we sought to evaluate and highlight those developmental targets from among them that best facilitate success for leaders who operate in dangerous contexts. We identified several commonly cited capacities and used these as a starting point for identifying targets for the development of dangerous context leaders.

Eight major concepts were common among theories of leader development: identity, moral/ethical capacity, cognitive capacity, experiences and expertise, self-regulatory capacities, efficacy beliefs, goals and goal orientation, and organizational context. Many of these are individual capacities that were defined in a context-free sense, so here we suggest how these and related constructs are relevant to dangerous contexts.

### Identity

Identity—a compilation of individual experiences, values, and knowledge—serves as a structure around which development is motivated and organized. One’s identity, or self-concept, is a multifaceted, organized structure of

**Table 19.1 Summary of Integrative Leadership Development Theories**

Development Theory	Identity	Moral/Ethical Capacity	Cognitive Capacity	Experiences and Expertise	Self-Regulatory Capacities	Efficacy Beliefs	Goals and Goal Orientation	Organizational Context
Avolio (1999)	Self-awareness and identification		Perspective-taking and intellectual stimulation	Life stream events	Adopt new ways of leading			Context and supporting mechanisms
Day et al. (2009)*	Identity, self-awareness	Moral development	Cognitive: ability, frames, and processes; sensemaking	Expertise	Regulatory strength, goal orientation	Self-efficacy	Implementation intentions; goal orientation	Social capital
Gardner et al. (2005)	Self-awareness	Moral integrity; moral development		Trigger events	Self-regulation		Goals and motives	Organizational climate and positive modeling
Maurer (2002)*	Self-schemas		Attitudes toward learning and development			Developmental efficacy	Learning goals	Work content and work context
Olivares (2008)*	Shared intentions		Sensemaking	Learning through beneficial experiences	Agency	Efficacy beliefs	Goals	
Russell and Kuhnert (1992)*			Information-processing and perspective-taking capacity	Task-related experience and skill acquisition	Self-regulatory abilities			Social context

Sources: B. J. Avolio, *Full Leadership Development: Building the Vital Forces in Organizations* (Thousand Oaks, Calif.: Sage Publications, 1999); D. V. Day, M. M. Harrison, and S. M. Halpin, *An Integrative Theory of Leadership Development: Connecting Adult Development, Identity, and Expertise* (New York: Psychology Press, 2009); W. L. Gardner et al., "Can You See the Real Me? A Self-Based Model of Authentic Leader and Follower Development," *Leadership Quarterly* 16 (2005): 343–372; T. J. Maurer, "Employee Learning and Developmental Orientation: Toward an Integrative Model of Involvement in Continuous Learning," *Human Resource Development Journal* 1 (2002): 9–44; O. J. Olivares, "The Formulation of a Leadership Development Praxis: Linking Intentions to Outcomes," *Leadership and Organization Development Journal* 29 (2008): 530–543; C. J. Russell, and K. W. Kuhnert, "Integrating Skill Acquisitions and Perspective Taking Capacity in the Development of Leaders," *Leadership Quarterly* 3 (1992): 335–353.

\*Individual-level focus

knowledge that contains traits, values, and memories and controls the processing of self-relevant information.<sup>12</sup> As such, identity is an important construct in a number of leadership theories. For example, authentic leaders are described as having the following attributes: “(a) the role of the leader is a central component of their self-concept, (b) they have achieved a high level of self-resolution or self-concept clarity, (c) their goals are self-concordant, and (d) their behavior is self-expressive.”<sup>13</sup> Significant experiences can assist in changing an individual’s identity to incorporate possible selves—for example, who the individual wants to be and believes they can become as a leader.<sup>14</sup> In general, leaders choose to relate events and experiences based upon what they perceive to be reflective of their current or possible self-views as a leader.<sup>15</sup> Thus, a focus on identity is important because it emphasizes one’s interpretation of events in a self-relevant manner, rather than the events themselves.

The intense experiences faced by leaders in dangerous contexts place unique demands on their identity. First, these challenges, often coupled with physical, mental and emotional fatigue may push leaders and their units to the breaking point. Such situations require high levels of self-awareness for leaders to maintain a sense of self and to understand their strengths and weaknesses when challenged. Further, they need to understand how the extreme context is influencing their emotions and cognition as well as how their subsequent behaviors are affecting those around them.

Second, dangerous contexts normally lack control and structure, and as a result, leaders may be thrust into a myriad of demands in close succession. This requires leaders to have a multifaceted identity.<sup>16</sup> For example, a recent study of combat-experienced leaders found that the current operational environment requires tactical-level leaders to have complex identities that allow them to adapt to fill multiple roles: intelligence manager, tactical war fighter and commander, diplomat and negotiator, nation builder, and troop and unit leader.<sup>17</sup> Successful leadership in this context is in part contingent upon a leader’s ability to strategically think and consider the impact of chosen tactics, maintain shared and coordinated situational awareness among his or her soldiers and coordinating units, assess insurgence threats, and remain prepared to react to threat while concurrently working with local security and civilian organizations. Tactical leaders must therefore have high levels of self-complexity in these domains. For example, bringing a “war fighter” identity to a negotiation exchange may elicit an undesired response from another leader (e.g., aggression) that would hamper success in that context.

Merely being self-complex is insufficient for achieving the adaptability leaders need to successfully meet their role demands. Self-complexity is context-specific in that leaders need to be multifaceted in those particular

identity aspects relevant to dangerous contexts.<sup>18</sup> While the complexities of modern tactical warfare are not characteristic of all dangerous contexts, this example highlights the need for leaders to develop capacities linked to identity structures that extend beyond surface traits and behaviors.

### **Moral / Ethical Capacity**

We took fire from insurgents hiding in the middle of a crowd. We could have fired into the crowd and been within the ROE [rules of engagement], but it just wouldn't have been right.

—An infantry captain in Iraq

Beyond the complexities and threat of dangerous contexts, the potential ethical implications of one's actions (or inaction) also make the context inherently morality laden. Leaders thus require highly developed moral character. Moral character involves those values and beliefs that are central to one's self-conception and that guide one's behavior. It includes the internalization of one's moral identity as demonstrated in the alignment of behavior with espoused values (i.e., integrity).<sup>19</sup> Moral identity is the view of the self "as one who acts on the basis of respect and/or concern for the rights and/or welfare of others."<sup>20</sup>

Leaders act as important role models and demonstrate through their decisions and behavior what the acceptable standards of behavior are.<sup>21</sup> Through observation, followers learn from and emulate their leader's behavior. In dangerous contexts, the development of moral identity is important for guiding leader behavior, in accordance with his or her values and beliefs. It is also important in that the moral behavior that flows from moral identity also influences the behavior of others in that context.

***Ethos.*** The concept of ethos is a construct related to moral character and professional ethics that is of central importance to organizations operating in dangerous contexts. Many such organizations have codified ethos. Examples include the U.S. Marine Corps Rifleman's Creed and the U.S. Army's Warrior's Ethos. The latter states, "I will always place the mission first; I will never accept defeat; I will never quit; and I will never leave a fallen comrade."<sup>22</sup>

Ethos is characterized by levels of character, values, and beliefs sufficient to motivate a willingness to endure the cognitive, emotional, and physical hardships associated with dangerous contexts and, if needed, risk physical injury or death. Ethos, as an aspect of moral character, goes beyond ordinary commitment to an organization or cause. With serious injury or death as real



possibilities, one's identity as a dangerous context leader goes beyond superficial externalities and may demand commitment at a level that would be considered extreme in most other contexts.

People tend to seek opportunities for development in those areas consistent with their self-identity. Hence, a person who sees himself as a moral leader would be prompted to further engage in and learn from moral experiences,<sup>23</sup> reinforcing self-complexity, leading "functional flexibility . . . adaptive psychological functioning and a heightened sense of personal agency."<sup>24</sup> Identity development can thus promote the development of expertise and equip leaders with cognitive and self-regulatory abilities that foster adaptability. Through the alignment of behavior with self-relevant standards, leaders model appropriate behavior for their followers.

### **Cognitive Capacity**

Officer Valerio and the other police officers in the van were intently listening to radio transmissions as they raced to Lower Manhattan from their home precinct in the Bronx. They didn't need to say what they were all thinking: This is bad, really bad. None of the officers knew what they would find when they got there, and they certainly hoped that there would be some ample direction and recognizable "cues" when they did.

What Officer Valerio remembers most, however, is the captain she found at the mobilization point for her group; she didn't even get his name. She approached him, expecting to be quickly put into action. Instead, she noticed that the captain's eyes were fixated on the flames billowing out of the upper half of Two World Trade Center. She watched those same eyes following each body as it came hurtling down from the upper floors of the building. With each thunderous crash signifying the end of another human life, the captain—giving no direction and in fact, saying nothing—returned his eyes to the upper half of the building, wordlessly awaiting the next victim.

Dangerous contexts often involve quick and violent episodes where the demands for planning, coordination, and employment of resources may challenge or overwhelm leaders' and their followers' cognitive abilities.<sup>25</sup> Indeed, an area of consensus in leadership research is that in highly complex situations timely adaptation to change is needed.<sup>26</sup> For example, individuals can become so overly emotional when exposed to catastrophic events that the way they process information and make decisions becomes distorted.<sup>27</sup>

Expansion of leader adaptive capacity requires development of more than just the surface skills identified in most competency models (i.e., the immediately observable traits and behaviors leaders exhibit). It also necessitates

development of the deeper knowledge structures and metacognitive skills that allow leaders to construct sophisticated understandings of situations and guide their thoughts and behaviors.<sup>28</sup> These deep knowledge structures refer to the individual's mental organization of information related to a particular domain, such as leading firefighting units. Leaders also require metacognitive skills that facilitate awareness and understanding of the relationship between task requirements and individual capabilities.<sup>29</sup> Metacognitive capacity acts as an "executive control" function for planning, monitoring, and regulating mental strategies, and thus for accessing deep knowledge structures and applying knowledge to specific situations.<sup>30</sup> Together the development of deep knowledge structures and metacognitive skills enhance leader adaptive capacity. Adaptive experts have developed detailed knowledge about relevant task domains and effectively organized that knowledge into memory.<sup>31</sup>

As these knowledge structures develop, it is important that leadership roles, traits, skills, and behaviors become increasingly central to and ultimately inextricably integrated with development of the leader's self-concept, enabling him or her to take on multiple leadership roles and to be adaptive to the demands of complex situations.<sup>32</sup> The linkage between knowledge structures and identity may be cultivated through a clear understanding of one's identity and interest in the development of roles, skills, and behaviors related to dangerous contexts.<sup>33</sup>

### **Experiences and Expertise**

"As leaders progress from novice to expert, they become increasingly capable of flexibly drawing on internal resources such as identities, values, and mental representations of subordinates and situations."<sup>34</sup> Expertise is knowledge of tasks and social issues related to leadership, recognizing that the knowledge available to a leader may depend on the current context. Expert leaders possess a richer set of skills and behaviors than that of a novice or less-skilled leader.<sup>35</sup> Also, expert leaders have richer conceptualizations of leadership than lesser-skilled leaders.<sup>36</sup> Thus, those with a greater knowledge base specific to their organizational context may be better equipped to succeed as leaders.

Self-knowledge, self-concept clarity, and the merging of personal and role identities are derived from individuals' experiences, which implies that experiences are an important part of leader development.<sup>37</sup> Indeed, individual experiences are antecedents for many of the developmental targets highlighted here. Without experiences, there is little basis for self-knowledge or developing clarity around one's self-concept. It is through individual experience that people make sense of their environment and their position in it.

Unique experiences across all phases of dangerous contexts are essential for leaders to situate their identity as a leader within the context of danger.

### **Self-Regulatory Capacities**

Pondering the importance of military leader development, I can't help but think of a recent report discussing how the people in Helmand province are taking on the insurgents. A key mission for our forces has been attacking Taliban strongholds in Helmand. As the Marines continue operations there, the people in this region have also begun to take action against the insurgents. Some would argue that the locals were finally fed up and mad enough to respond to the harshness of the Taliban, but the threats and intimidation they've experienced over the last decade have been constant. Why have they now decided to fight back?

Conditions changed this year with the presence of U.S. and coalition forces conducting deliberate operations to root out and destroy the Taliban. The success of our forces in fighting the Taliban has given the people the confidence to fight and defeat their oppressors, and when one Afghani fights back, this confidence spreads to others. In their day-to-day lives, local Afghans face death threats and murder for providing support to the Afghan government and coalition forces. Yet these civilians have developed the confidence to fight this ruthless enemy, marking a positive development for the people and villages who've felt helpless in the face of intimidation. They serve as a model for our military leaders; through their example we understand the importance of building confidence to fight and defeat the enemy.

—A U.S. officer in Afghanistan

***Efficacy Beliefs.*** To face the intense demands of dangerous contexts, leaders require high levels of leader efficacy. Self-efficacy is individual confidence in one's ability "to organize and execute courses of action required to attain designated types of performances."<sup>38</sup> One's efficacy beliefs enable self-regulation of behavior. This is because self-efficacy beliefs help determine what individuals do with the knowledge and skills they have. Therefore, how people behave can often be better predicted by their beliefs about their capabilities than by their actual capabilities. Self-efficacy beliefs are contextually specific and developable, being influenced most through mastery experiences and vicarious experiences provided by role models.<sup>39</sup>

To say that efficacy beliefs are contextually specific means that they apply to specific tasks or domains of behavior but not to others. In the case of leader self-efficacy, these beliefs concern a person's confidence in his or her ability to successfully enact the set of behaviors associated with leading. Leader

self-efficacy beliefs have been demonstrated to contribute to leader effectiveness.<sup>40</sup> Efficacy beliefs are important for leadership in that they motivate efforts at effective leadership and overcoming challenges faced in the leadership process.<sup>41</sup>

Efficacy is required to motivate one to attempt a task and to persist when beset by challenges. As the epigraph above notes, the people in Helmand province did not fight back until they gained sufficient efficacy due to the context created by the military forces. Efficacy beliefs inform leaders that despite failures or setbacks, they have the ability to accomplish the task at hand. Further, research in stress and coping highlights the relevance of self-efficacy as a context-specific variable beneficial for managing stressors.<sup>42</sup> For leader development, it is important to understand that these beliefs develop through experience, both personal and through observation of others.

**Sensemaking.** Sensemaking is a process by which individuals “construct meaningful explanations for situations and their experiences within those situations.”<sup>43</sup> Sensemaking theory is built on the idea that individuals are “continuously bombarded by ambiguous environmental and organizational information that must be somehow noticed, interpreted, and acted upon.”<sup>44</sup> It is distinctly applicable to dangerous contexts, where leaders play an important role in giving meaning or interpreting what is happening within organizations.<sup>45</sup>

Sensemaking in situ (e.g., during extreme events) may be the most critical when individuals face novel and ill-defined events. Effective leaders provide followers with a sense of meaning to “get their bearings and then create fuller, more accurate views of what is happening and what their options are.”<sup>46</sup> In dynamic, novel situations people think by acting and interpreting the response to those actions. Therefore they must not only be guided by current knowledge, but must also filter and process new knowledge from the unfolding situation.<sup>47</sup>

**Goals and Goal Orientation.** Another important leader capacity—particularly for the in situ dangerous context—is one’s learning goal orientation. Individuals generally fall into one of two major classes of goal orientation: learning-goal oriented and performance-goal oriented. Learning-goal oriented individuals develop competence and expand abilities by seeking to master challenging situations, and performance-goal oriented individuals attempt to validate their competence by seeking favorable judgments and avoiding negative judgments.<sup>48</sup> It has been demonstrated that a learning-goal orientation is important for shifting focus during complex tasks from the end result to the process.<sup>49</sup> In a dangerous context, a process focus may be important because learning-goal-oriented individuals deal well with negative

feedback and handling distress;<sup>50</sup> performance-goal-oriented individuals tend to be apprehensive of failure and are concerned with consequences of poor performance. Thus, a learning-based approach serves in a functional capacity for complex, challenging circumstances.

***Developmental Readiness.*** The concept of leader developmental readiness integrates many of the capacities outlined thus far.<sup>51</sup> Developmental readiness is defined as “the ability and motivation to attend to, make meaning of, and appropriate new leader KSAs (knowledge, skills, abilities, and attributes) into knowledge structures along with concomitant changes in identity to employ those KSAs.”<sup>52</sup> Further, “motivation to develop is promoted through interest and goals, learning goal orientation, and developmental efficacy, while ability to develop is promoted through leaders’ self-awareness, self-complexity, and meta-cognitive ability.”<sup>53</sup> In accordance, developmental readiness is a capacity supported by other key developmental targets highlighted above and may be most relevant for leaders in the anticipatory and post hoc phases of dangerous contexts. For the anticipatory phase, leaders must be motivated to establish goals and learn the complexities of the presented context. For the post hoc phase, learning experienced in dangerous contexts must be synthesized for future use into the leader’s knowledge structures.

***Optimism, Resiliency, and Courage.*** The intense challenges posed by dangerous contexts require leaders and their followers to possess ample psychological resources with which to face traumatic experiences. Fear and negative emotions tend to narrow the scope of cognition and attention, limiting potential thought-action repertoires (e.g., creating a fight or flight response). It is argued, however, that positive psychological capacities, such as optimism or resiliency, offer personal resources to overcome such narrowing effects and that these resources offset negative emotions during stress, thus creating an “undoing effect,” which “loosen[s] the hold that a negative emotion has gained on that person’s mind and body by dismantling or undoing preparation for specific action.”<sup>54</sup>

***Leader Optimism.*** Optimism primarily focuses on explanatory style<sup>55</sup> and to a lesser degree, future expectancies.<sup>56</sup> Drawing from classic attribution theory,<sup>57</sup> positive leaders have an optimistic explanatory style, in which they tend to attribute positive events or outcomes to intrapersonal, permanent, and persistent causes; they attribute negative events or outcomes to external, transitory, and situation-specific causes.<sup>58</sup> This helps them maintain the view that they can personally bring about positive change in their context. Setbacks are seen as externally imposed events that they can react to and overcome.

**Leader Resiliency.** Resiliency is the “positive psychological capacity to rebound, to ‘bounce back’ from adversity, uncertainty, conflict, failure or even positive change, progress and increased responsibility.”<sup>59</sup> Unlike optimism, which focuses on future expectations, resiliency is reactive and focuses on reactions to previous or expected setbacks. Resiliency is “a class of phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk.”<sup>60</sup> It is critical for leaders and followers operating in dangerous contexts, where volatility may create cycles of successes and failures, thus requiring them to pick themselves up after failures, make sense of and learn from their failures, and avoid ruminating on the failures and instead focus (with optimism) on the next challenge.

## FUTURE DIRECTIONS

In preparing this chapter we sought to integrate current work on leadership development and lay a basic foundation for future work on leadership development for dangerous contexts. To a degree, there is an assumption in our focus on key developmental targets that they are collectively important across all the phases of dangerous contexts. Though we make suggestions as to when capacities may be most beneficial, clearly the profile of important developmental targets changes as an organization moves through the phases of the context. Such changes then lead us to question whether it is possible to have a leader capable of effectively meeting the demands of all three phases of dangerous contexts.

If different roles require different leadership capabilities, individual leaders need to be adaptive and self-complex experts, or they will be rigid or ineffective in certain phases of extreme contexts. As organizations in these contexts are rarely afforded the luxury of swapping out leaders who best fill each role or situation, it raises the question of what collective leadership mechanisms, such as social systems and organizational strategies, may provide the collective capacity (i.e., leadership) to meet the demands across all phases when such expectations are impractical for individual leaders. This requires integrating theories of shared leadership, team leadership, and social network leadership.<sup>61</sup>

We have discussed the difference between leader and leadership development, with the primary focus being on development of individual leader capacities. That is, we detailed what it is that develops within leaders (i.e., self-regulation, identity, ethos, and so on); however, for future discussions of leadership development for dangerous contexts, it will be important to consider the collective or organizational processes that influence or even foster

individual development. It has been demonstrated that there are three major components of jobs: physical demands, complexity, and the social environment.<sup>62</sup> Whereas dangerous contexts are in and of themselves complex and physically and psychologically demanding, it is leadership that shapes the social context of the organization (see Table 19.1). In accordance, group processes, such as collective identification, adaptive systems, socialization, and collective expertise may be important as developmental targets for collective leadership. For example, Zaccaro and colleagues highlight the importance of organizational culture, group cohesion, and a number of other collective factors that are important in shaping the organizational context (see Chapter 10 in this volume).

Further, some individual-level constructs can be elevated to the collective level where “through social interaction, exchange, and amplification—[constructs] have emergent properties that manifest at higher levels.”<sup>63</sup> Here collective-level phenomena emerge from the discontinuous interactions of agents, which creates distinct team-level phenomena, such as positive team cognitive, motivational, and affective states (e.g., cohesion). These states then over time facilitate future team performance.<sup>64</sup> One example is self-efficacy: over time, when highly efficacious team members interact, they create a form of collective efficacy where they come to jointly believe that the team can operate effectively.<sup>65</sup>

Collectives reinforce certain values and identities among their members through normative pressures and informational means whereby members seek to teach new members the “correct” way to act.<sup>66</sup> Collectives are thus powerful instruments of social influence and create substantial effects on the behavior of team members.<sup>67</sup> Constructs at the individual level can be similarly raised to the collective level. For example, positive emotions are contagious and can serve to make others in a group more positive.<sup>68</sup>

Space did not allow for an in-depth discussion of the specific processes through which to develop the capacities in our model in dangerous context leaders. Yet, we believe the specific processes of leader development likely do not fundamentally differ between developing leaders for non-dangerous contexts versus dangerous contexts. The process of providing challenge, feedback, reflection, and support, for example, is highly relevant across contexts.<sup>69</sup> We suggest that interested readers review the frameworks in Table 1 for further guidance on these processes. We should be clear, however, that while the process may be the same, the content of the training, education, and development must be directly relevant to dangerous contexts and target capacities such as those we have laid out here. The context in which training, education, and

development occurs must be ecologically valid, replicating or simulating the factors present in dangerous contexts as best able within safety considerations.

In conclusion, we have outlined various facets of dangerous contexts and provided a set of developable capacities that we believe are critical for preparing leaders to operate in such contexts. This list is by no means comprehensive, but may serve as a starting point to inform future leader development efforts for leadership in dangerous contexts.

### KEY TAKE-AWAY POINTS

1. In order to effectively develop leaders, it is necessary to understand the context for which they are being developed and the developmental targets that foster success within that context.
2. Leadership development for dangerous contexts is defined as a process that builds individual and collective capacities and the organizational systems and contexts to foster adaptive response across phases of preparation for, function during, and post hoc recovery from dangerous contexts.
3. Important developmental targets for dangerous context leaders include identity, moral/ethical capacity, cognitive capacity, adaptive expertise, self-regulatory abilities, and psychological capacities.
4. Leaders should operate successfully across all phases of dangerous contexts (i.e., pre, in situ, and post hoc), therefore, it is important to communicate clear expectations for development of individual leaders as adaptive and self-complex experts, or they will be rigid or ineffective in certain phases of extreme contexts.

### KEY REFERENCES

- Day, D. V., M. M. Harrison, and S. M. Halpin. *An Integrative Theory of Leadership Development: Connecting Adult Development, Identity, and Expertise*. New York: Psychology Press, 2009.
- Hannah, S. T., et al. "A Framework for Examining Leadership in Extreme Contexts." *Leadership Quarterly* 20 (2009): 897–919.



## NOTES

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1. M. J. Gelfand, L. M. Leslie, and R. Fehar, "To Prosper, Organizational Psychology Should . . . Adopt a Global Perspective," *Journal of Organizational Behavior* 29 (2008): 493–517; L. W. Porter, "Organizational Psychology: A Look Backward, Outward, and Forward," *Journal of Organizational Behavior* 29 (2008): 519–526.
2. B. J. Avolio, "Promoting More Integrative Strategies for Leadership Theory-Building," *American Psychologist* 62 (2007): 25–33; S. T. Hannah, D. J. Campbell, and M. D. Matthews, "Advancing a Research Agenda for Leadership in Dangerous Contexts," *Military Psychology* 22 (2010): S157–S189.
3. S. T. Hannah et al., "A Framework for Examining Leadership in Extreme Contexts," *Leadership Quarterly* 20 (2009): 897–919; J. D. Blair and J. G. Hunt, "Getting Inside the Head of the Management Researcher One More Time: Context-Free and Context-Specific Orientations in Research," *Journal of Management* 12 (1986): 147–166; Y. Berson et al., "Leadership and Organizational Learning: A Multiple Levels Perspective," *Leadership Quarterly* 17 (2006): 577–594.
4. O. J. Olivares, "The Formulation of a Leadership Development Praxis: Linking Intentions to Outcomes," *Leadership and Organization Development Journal* 29 (2008): 530–543.
5. S. Folkman and R. S. Lazarus, "If It Changes It Must Be a Process: Study of Emotion and Coping during Three Stages of a College Examination," *Journal of Personality and Social Psychology* 48 (1987): 150.
6. Hannah et al., "A Framework for Examining Leadership in Dangerous Contexts," 897–919, 898.
7. Hannah et al., "A Framework for Examining Leadership in Dangerous Contexts."
8. T. J. Maurer, "Employee Learning and Developmental Orientation: Toward an Integrative Model of Involvement in Continuous Learning," *Human Resource Development Journal* 1 (2002): 14.
9. D. V. Day, "Leadership Development: A Review in Context," *Leadership Quarterly* 11 (2000): 582.
10. J. Antonakis, A. T. Cianciolo, and R. J. Sternberg, introduction in *The Nature of Leadership*, ed. J. Antonakis, A. T. Cianciolo, and R. J. Sternberg (Thousand Oaks, Calif.: Sage, 2004), 3–15.
11. Hannah et al., "A Framework for Examining Leadership in Dangerous Contexts," 913.
12. H. Markus and E. Wurf, "The Dynamic Self-Concept: A Social Psychological Perspective," *Annual Review of Psychology* 38 (1987): 299–337.
13. B. Shamir and G. Eilam, "What's your story? A Life-Stories Approach to Authentic Leadership Development," *Leadership Quarterly* 16 (2005): 399.
14. B. J. Avolio et al., "Unlocking the Mask: A Look at the Process by Which Authentic Leaders Impact Follower Attitudes and Behaviors," *Leadership Quarterly* 15 (2004): 801–823.
15. Shamir and Eilam, "Life-Stories Approach," 395–417.

16. S. T. Hannah, L. Woolfolk, and R. G. Lord, "Leader Self-Structure: A Framework for Positive Leadership," *Journal of Organizational Behavior* 30 (2009): 269–290.
17. S. T. Hannah, P. Jennings, and O. Ben-Yoav Nobel, "Tactical Military Leader Requisite Complexity: Toward a Referent Structure," *Military Psychology* 22 (2010): 1–38.
18. R. G. Lord, S. T. Hannah, and P. L. Jennings, "A Framework for Understanding Leadership and Individual Requisite Complexity," *Organizational Psychology Review* 2 (2011): 104–127.
19. T. Simons, "Behavioral Integrity: The Perceived Alignment between Managers' Words and Deeds as a Research Focus," *Organization Science* 13 (2002): 18–35.
20. D. Moshman, *Adolescent Psychological Development: Rationality, Morality, and Identity*, 2nd ed. (Mahwah, N.J.: Erlbaum, 2005), 121.
21. M. E. Brown, L. K. Treviño, and D. A. Harrison, "Ethical Leadership: A Social Learning Perspective for Construct Development and Testing," *Organizational Behavior and Human Decision Processes* 97 (2005): 117–134.
22. Department of the Army, *Army Leadership: Competent, Confident, and Agile* (Washington, D.C., 2001).
23. R. G. Lord and R. J. Hall, "Identity, Deep Structure and the Development of Leadership Skills," *Leadership Quarterly* 16 (2005): 591–615.
24. Hannah, Woolfolk, and Lord, "Leader Self-Structure," 277.
25. P. Shrivastava et al., "Understanding Industrial Crisis," *Journal of Management Studies* 25 (1988): 285–303; K. E. Weick, "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster," *Administrative Science Quarterly* 38 (1993): 628–652.
26. S. T. Hunter, K. E. Bedell-Avers, and M. D. Mumford, "The Typical Leadership Study: Assumptions, Implications, and Potential Remedies," *Leadership Quarterly* 18 (2007): 435–446; R. Marion and M. Uhl-Bien, "Leadership in Complex Organizations," *Leadership Quarterly* 12 (2001): 389–418.
27. P. A. Sorokin, *Man and Society in Calamity* (New York: Dutton, 1943).
28. Lord and Hall, "Identity, Deep Structure and the Development of Leadership Skills," 591–615.
29. M. Pressley et al., "Perceived Readiness for Examination Performance (PREP) Produced by Initial Reading of Text and Text Containing Adjunct Questions," *Reading Research Quarterly* 22 (1987): 219–236.
30. J. Metcalf and A. P. Shimamura (eds.), *Metacognition: Knowing about Knowing* (Cambridge, Mass.: MIT Press, 1994).
31. M. L. Gick and K. J. Holyoak, "The Cognitive Basis of Knowledge Transfer," in *Transfer of Learning: Contemporary Research and Applications*, ed. S. M. Cormier and J. D. Hagman (Orlando: Academic Press, 1987), 9–46.
32. Lord and Hall, "Identity, Deep Structure and the Development of Leadership Skills," 591–615.
33. S. T. Hannah and B. J. Avolio, "Ready or Not: How Do We Accelerate the Developmental Readiness of Leaders?" *Journal of Organizational Behavior* 30 (2010): 1–7.
34. Lord and Hall, "Identity, Deep Structure and the Development of Leadership Skills," 592.

35. Ibid.
36. Hannah, Woolfolk, and Lord, "Leader Self-Structure," 269–290.
37. Shamir and Eilam, "Life-Stories Approach," 395–417.
38. A. Bandura, *Social Foundations of Thought and Action: A Social Cognitive Theory* (Englewood Cliffs, N.J.: Prentice Hall, 1986), 391.
39. Ibid., 2.
40. M. M. Chemers, C. B. Watson, and S. T. May, "Dispositional Affect and Leadership Effectiveness: A Comparison of Self-Esteem, Optimism, and Efficacy," *Personality and Social Psychology Bulletin* 26 (2000): 267–277.
41. K. Y. Chan and F. Drasgow, "Toward a Theory of Differences and Leadership: Understanding the Motivation to Lead," *Journal of Applied Psychology* 86 (2001): 481–498; S. T. Hannah et al., "Leadership Efficacy: Review and Future Directions," *Leadership Quarterly* 19 (2008): 669–692; L. L. Paglis and S. G. Green, "Leadership Self-Efficacy and Managers' Motivation for Leading Change," *Journal of Organizational Behavior* 23 (2002): 215–235.
42. S. Folkman, "Commentary on the Special Section 'Theory-Based Approaches to Stress and Coping' Questions, Answers, Issues, and Next Steps in Stress and Coping Research," *European Psychologist* 14 (2009): 72–77.
43. D. A. Gioia, "Symbols, Scripts, and Sensemaking: Creating Meaning in the Organizational Experience," in *The Thinking Organization*, ed. H. P. Sims Jr., D.A. Gioia, and Associates (San Francisco: Jossey-Bass, 1986), 61.
44. M. J. O'Fallon and K. D. Butterfield, "A Review of the Empirical Ethical Decision-Making Literature: 1996–2003," *Journal of Business Ethics* 59 (2005): 375–413.
45. D. V. Day, "Leadership Development: A Review in Context," *Leadership Quarterly* 11 (2000): 581–614.
46. K. E. Weick, "Drop Your Tools: An Allegory for Organizational Studies," *Administrative Science Quarterly* 41 (1996): 310.
47. Ibid.
48. D. VandeWalle, W. L. Cron, and J. W. Slocum, "The Role of Goal Orientation Following Performance Feedback," *Journal of Applied Psychology* 86 (2001): 629–640.
49. G. H. Seijts et al., "Goal Setting and Goal Orientation: An Integration of Two Different Yet Related Literatures," *Academy of Management Journal* 47 (2004): 227–239.
50. D. VandeWalle et al., "An Integrated Model of Feedback-Seeking Behavior: Disposition, Context, and Cognition," *Journal of Applied Psychology* 85 (2000): 996–1003.
51. S. T. Hannah and B. J. Avolio, "Leader Character, Ethos, and Virtue: Individual and Collective Considerations," *Leadership Quarterly* (in press).
52. Ibid.
53. Ibid.; B. J. Avolio and S. T. Hannah, "Developmental Readiness: Accelerating Leader Development," *Consulting Psychology Journal* 60 (2008): 331–347.
54. B. L. Fredrickson, "The Role of Positive Emotions in Positive Psychology: The Broaden-and-Build Theory of Positive Emotions," *American Psychologist* 56 (2001): 218–226; B. L. Fredrickson et al., "What Good Are Positive Emotions in Crisis? A

- Prospective Study of Resilience and Emotions Following the Leader Self-Structure Terrorist Attacks on the US on Sept 11th, 2001," *Journal of Personality and Social Psychology* 84 (2003): 365–376.
55. F. Luthans, C. M. Youssef, and B. J. Avolio, *Psychological Capital: Developing the Human Competitive Edge* (Oxford: Oxford University Press, 2007); M. E. P. Seligman, *Learned Optimism* (New York: Knopf, 1991).
  56. C. S. Carver and M. F. Scheier, "Optimism," in *Handbook of Positive Psychology*, ed. C. R. Snyder and S. Lopez (Oxford: Oxford University Press, 2002), 231–243; M. F. Scheier and C. S. Carver, "Optimism, Coping, and Health: Assessment and Implications of Generalized Outcome Expectancies," *Health Psychology* 4 (1985): 219–247.
  57. H. H. Kelley, *Attribution in Social Interaction* (Morristown, N.J.: General Learning Press, 1971); B. Weiner, *Achievement Motivation and Attribution Theory* (Morristown, N.J.: General Learning Press, 1974).
  58. Seligman, *Learned Optimism*.
  59. F. Luthans, "The Need for and Meaning of Positive Organizational Behavior," *Journal of Organizational Behavior* 23 (2002): 702.
  60. A. S. Masten and M. G. J. Reed, "Resilience in Development," in *Handbook of Positive Psychology*, ed. C. R. E. L. Snyder and J. Shane (London: Oxford University Press, 2002), 75.
  61. J. B. Carson, P. E. Tesluk, and J. A. Marrone, "Shared Leadership in Teams: An Investigation of Antecedent Conditions and Performance," *Academy of Management Journal* 50 (2007): 1217–1234; S. T. Hannah, J. T. Eggers, and P. L. Jennings, "Complex Adaptive Leadership," in *Knowledge Driven Corporation: A Discontinuous Model*, ed. G. B. Graen and J. A. Graen, LMX Leadership: The Series, vol. 6 (Charlotte, N.C.: Information Age Publishing, 2008); S. W. J. Kozlowski and B. S. Bell, "Work Groups and Teams in Organizations," in *Comprehensive Handbook of Psychology: Industrial and Organizational Psychology*, ed. W. C. Borman and D. R. Ilgen, vol. 12 (New York: Wiley, 2003), 333–375; C. L. Pearce and J. A. Conger, *Shared Leadership: Reframing the Hows and Whys of Leadership* (Thousand Oaks, Calif.: Sage, 2003).
  62. F. P. Morgeson and M. A. Campion, "Avoiding Tradeoffs When Redesigning Work: Evidence from a Longitudinal Quasi-experiment," *Personnel Psychology* 55 (2002): 589–612.
  63. S. W. J. Kozlowski and K. J. Klein, "A Multilevel Approach to Theory and Research in Organizations: Contextual, Temporal, and Emerging Processes," in *Multilevel Theory, Research and Methods in Organizations: Foundations, Extensions, and New Directions*, ed. K. J. Klein and S. W. J. Kozlowski (San Francisco: Jossey-Bass, 2000), 15.
  64. J. R. Hackman, *Groups That Work (and Those That Don't)* (San Francisco: Jossey-Bass, 1990); M. A. Marks, J. E. Mathieu, and S. J. Zaccaro, "A Temporally Based Framework and Taxonomy of Team Processes," *Academy of Management Review* 26 (2001): 356–376.
  65. Hannah et al., "Leadership Efficacy," 669–692.
  66. P. J. Hinds and M. Mortensen, "Understanding Conflict in Geographically Distributed Teams: The Moderating Effects of Shared Identity, Shared Context, and Spontaneous Communication," *Organization Science* 16 (2005): 290–307; P. Selznick, *The Moral Commonwealth* (Berkeley: University of California Press, 1992).

67. G. R. Salancik and J. Pfeffer, "A Social Information Processing Approach to Job Attitudes and Task Design," *Administrative Science Quarterly* 23 (1978): 224–253.
68. P. D. Cherulnik et al., "Charisma Is Contagious: The Effects of Leaders' Charisma on Follower Affect," *Journal of Applied Social Psychology* 31 (2001): 2149–2159; E. Hatfield, J. T. Cacioppo, and R. L. Rapson, *Emotional Contagion* (Cambridge: Cambridge University Press, 1994).
69. Day, Harrison, and Halpin, *An Integrative Theory of Leadership Development*.