Chapter 6 Leader Developmental Readiness: Deconstructed and Reconstructed

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In recent reviews of the leadership scholarship field, authors report the existence of more than 60 different leadership theories (Dinh et al., 2014) and opine regarding the infancy of theory integration (Meuser et al., 2016). In contrast to the leadership field, scholarship on leader development (i.e., expansion of an individual leader's capacity; Day, 2000) and leadership development (i.e., expansion in the collective leadership capacity of a group or an organization) is in its nascent stages (Day & Dragoni, 2015). With so few theories of leader development available to guide empirical research, theory development is more necessary than theory integration. Until recently, leader development scholars focused on identifying the "right" theory of leadership and then trained leaders to behave in alignment with that theory (Day, Fleenor, Atwater, Sturm, & McKee, 2014). Day et al. (2014) argue, however, that the field must go beyond this approach and toward understanding the process of *development*.

One of the few theories of leader development, leader developmental readiness (LDR) (Avolio & Hannah, 2008) addresses the state of the leaders embarking upon development as a central determinant of developmental success. Given the ongoing and dynamic nature of leader development, it is not surprising that the effectiveness of leader development initiatives is highly variable (Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009). Some leaders grow by leaps and bounds to attain high levels of leader development outcomes (e.g., efficacy, self-awareness, leader identity, leadership knowledge, and skills; Day & Dragoni, 2015), while others fail to change at all. Several explanations exist for the variability of development in leaders who seem to have similar leadership experiences, yet one explanation that stands out is the individual leader's *readiness* to learn and grow. Those leaders who are "developmentally ready" maximize growth from leadership experiences or formal training (Hannah & Avolio, 2010). LDR refers to "the ability and the motivation to

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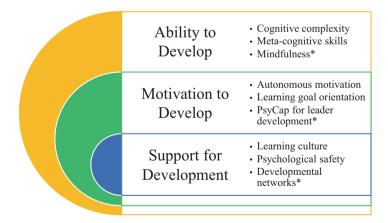
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attend to, make meaning of, and appropriate new leader KSAAs (knowledge, skills, abilities, and attributes) into knowledge structures along with concomitant changes in identity to employ those KSAAs" (Hannah & Avolio, 2010, p. 1182). Beyond the individual's ability and motivation to develop, the readiness of the organization to support leader development rounds out the LDR framework (Day, Harrison, & Halpin, 2009).

The purpose of this chapter is to first deconstruct LDR into its various pieces and parts around the three pillars of (a) ability to develop, (b) motivation to develop, and (c) support for development. At first glance, LDR is a relatively new idea with the first papers on this topic published within the past decade (Avolio & Hannah, 2008). However, when we deconstruct LDR, we see that it is composed of ideas that scholars have studied for quite some time, yet the concepts may be novel when applied to developing leaders. As part of our deconstruction and shown in Fig. 6.1, we examine both the established components of LDR such as metacognitive ability, learning goal orientation, and learning culture, and also introduce new constructs and argue for their inclusion in LDR, including mindfulness, psychological capital for leader development, and developmental networks. Finally, we reconstruct the higher order construct of LDR by examining interactions between its parts.

By examining LDR in this way, we contribute a situated understanding of LDR within broader discussions on learning and development. We conceptualize LDR as an overarching framework with components that can be flexibly identified depending on the purpose (e.g., selection, needs assessment, and preparation). We also introduce and argue for new components to the LDR framework that extend prior work. Finally, by reconstructing interactions among LDR components, we establish an agenda for future research.



Note. *reflects newly proposed components of leader developmental readiness

Fig. 6.1 Deconstruction: leader developmental readiness components

6.1 Situating Leader Developmental Readiness

To begin, we situate LDR in the broader context of training and development. Because leader development is one component of the larger training and development function within organizations, some parallels can be drawn between these two areas. Specifically, analyzing LDR prior to leader development is akin to conducting a needs assessment prior to employee training (e.g., Noe, 2013). Needs assessment-the first step in the training design process-consists of three components: task analysis, person analysis, and organizational analysis. In the leadership realm, task analysis can be equated to identification of the organization's leadership competency model, which defines the knowledge, skills, abilities, or other characteristics necessary for leadership success within the organization (Sanchez & Levine, 2009). Second, person analysis reflects an examination of the ability and motivation of individuals entering leader development (i.e., the first two pillars of LDR). Finally, organizational analysis questions the degree of support of the organizational context to support the leader development program (i.e., the third LDR pillar). From our observations of the extant literature, needs assessment-particularly person analysis-is a step that is skipped in the design and delivery of leader development programs. Knowing which employees are able and motivated to learn from leader development opportunities and understanding the transfer climate of the organizational context the employee is operating within (i.e., support pillar of LDR) are essential to development success.

6.2 Deconstructing Leader Developmental Readiness

To deconstruct LDR, we distinguish between readiness to *develop* leadership and readiness to *enact* leadership (see Table 6.1). Although both require an interest in leadership and are likely to result in leadership behaviors, what it means to be *ready to develop* as a leader is conceptually distinct from what it takes to be *ready to perform* as a leader. For example, being ready to perform means the leader is technically competent and knowledgeable of the domain (ability to lead), is confident and

	Readiness to develop leadership	Readiness to perform leadership
Ability	The leader has the ability to learn from experiences (e.g., metacognitive skills)	The leader is technically competent and knowledgeable of domain (e.g., interpersonal skills)
Motivation	The leader is driven to develop as a leader, to experiment with leadership behaviors, and to learn from mistakes	The leader is confident and interested in leading
Support	The group supports the leader in making mistakes and learning new leadership skills	The group supports or endorses the leader to take charge of the group

 Table 6.1
 Distinctions between readiness to develop as a leader and readiness to perform as a leader

motivated to lead (motivation to lead), and has the support of the group to take on the leadership role (support for leadership). In contrast, readiness to develop as a leader refers to preparedness to benefit and learn from a developmental experience (Day et al., 2009), which is often very different.

To distinguish between these overlapping concepts, we consider ability, motivation, and contextual support to develop leadership versus enact leadership. First, a leader with high levels of LDR has a strong ability to learn from experiences, not necessarily perform as a leader. One's ability to develop is likely to result in the development of leadership ability over time—which, fundamentally, is the goal of emphasizing LDR. Different abilities are required to develop as a leader (e.g., metacognition) than those abilities required to lead (e.g., interpersonal effectiveness).

With regard to motivation to develop, a leader is motivated to develop leadership skills, to try out different behaviors, see what works and what doesn't, and learn from mistakes. Again, this form of motivation to develop is distinct from one's motivation to lead. Chan and Drasgow (2001) describe three different motivations to engage in leadership—affective identity ("I am motivated to lead because I identify myself as a leader. It is who I am."), social normative ("I am motivated to lead because I feel an obligation to others. It is my moral responsibility."), and non-calculative ("I am motivated to lead *not* because of the costs and benefits of leading."). Someone high in motivation to lead may view oneself as such an excellent leader that they do not perceive a need to develop.

Finally, perhaps the starkest contrast between readiness to develop and readiness to lead is apparent when examining the third pillar of LDR—the context. With LDR, the context is suited to support the development of the leader by allowing for experimentation and freedom to learn from failure. On the other hand, a context supportive of leader performance is reflected by the granting of power by the group to the leader coupled with the high expectations for group outcomes. Distinct from readiness to lead, LDR is considered to be a function of the *developmental* orientation of the leader's ability, motivation, and context (Day et al., 2009). Next, we deconstruct each of the three pillars of LDR in turn.

6.2.1 Ability to Develop as a Leader

The first of the three pillars of LDR is the ability to develop as a leader. The basic premise is that leaders possessing the right mix of individual differences in their ability to develop will glean more from leadership experiences or formal programming and thus the expansion of their leadership capabilities will be accelerated (Avolio & Hannah, 2008).

A key dimension of ability to develop is referred to as leader complexity (Avolio & Hannah, 2008; Hannah & Avolio, 2010), which refers to a leader's ability to differentiate and integrate new knowledge regarding oneself and regarding leadership into mental schemas. Although not mentioned by prior authors, we argue that high levels of cognitive complexity are a function of a leader's global intelligence, more accurately referred to as general mental ability. In fact, general mental ability has been defined by Schmidt (2009, p. 4) as the "ability to learn" and has been found to predict acquisition of job knowledge (Schmidt & Hunter, 2004). In effect, general mental ability will facilitate a leader's success in processing, interpreting, and integrating new developmental experiences into a more complex understanding of oneself and of leadership.

According to meta-analytic findings, the relationship between intelligence and leadership is positive yet weaker than previously thought (r = 0.27; Judge, Colbert, & Ilies, 2004), perhaps because what matters is that the leader's intelligence is comparable to their followers (Ghiselli, 1963). More relevant here, however, is that no studies have directly examined the relationship between intelligence and leader *development*, which may be an oversight given the role of intelligence in learning. The absence of an explicit discussion of intelligence in the leader development literature may be due to the adverse impact that intelligence tests have on minority groups (Schmidt, 2009), making the concept out of favor. Adding to the adverse impact limitation, the inclusion of general mental ability within the ability component of LDR is not useful beyond a selection function because intelligence is a fixed trait and not open to development. Moreover, higher order mental abilities are more relevant than general mental ability to the specific context of leader development (e.g., Kovacs & Conway, 2016).

If we deconstruct the ability to develop into higher order, specific skills, practitioners are able to go beyond merely selecting intelligent leaders for development programs. Instead, by understanding the ability to develop as specific, learnable practices, practitioners can foster the development of LDR in leaders prior to and during developmental experiences or formal training. In other words, the objective of a formal leadership training should be to increase leaders' ability to develop so that they can glean more from stretch experiences on the job. We offer two skillbased practices composing the ability to develop, with the first—metacognitive skills—being previously discussed as a component of LDR (Avolio & Hannah, 2008; Black, Soto, & Spurlin, 2016) and the second—mindfulness—being a new addition to the LDR framework with promising applications.

Metacognitive skills. Kitchner (1983) identifies three levels of cognition. Standard cognition, the first level of cognitive process, is simply memorizing, reading, and solving problems. Metacognition is a second-level cognitive process that develops early in life and is utilized throughout one's life. The third level of cognitive process, epistemic cognition, develops in adult years and focuses on how individuals contemplate the nature of knowledge (an approach for developing epistemic cognition in academic environments is explored in Chapter 10). We will focus on metacognition for its role in leader development. Specifically, metacognitive skills refer to the capacity to facilitate "thinking about thinking" and "monitor and control cognition and one's awareness of cognitive strengths and weaknesses" (Hannah & Avolio, 2010, p. 1184). It requires an active reflection about the thinking process itself. Reflecting on thinking leads to knowing what we know and how we learn what we know. At its core, metacognition includes (1) monitoring, (2) controlling, and (3) reflecting on cognition.

These processes aid in leader development for several reasons. First, monitoring one's awareness of cognition provides a heightened understanding of one's own learning patterns (Garner & Alexander, 1989; Pressley & Ghatala, 1990). Simply being skilled at monitoring one's cognition allows for a deeper involvement in the processes of learning. For example, leaders can practice think-aloud learning by

verbally processing their learning experience. This will help leaders become more aware of their learning process. Metacognitive skills enable leaders to develop effectively by accurately understanding areas to monitor and adapt learning skills (Avolio & Hannah, 2008; Schraw & Dennison, 1994).

Second, controlling cognitive processes offers a heightened sense of awareness during learning and sensitivity to challenges. Leaders who enact metacognitive skills consider situations critically to facilitate sharpening their skills to learn, plan, monitor, and evaluate. For example, leaders can use their knowledge from monitoring to assist creating goals for situations on how to behave. Leaders who get into the habit of behavioral goal creation will increase their ability to intentional control future behavior. These skills accelerate a leader's potential learning from developmental programs and stretch experiences by having the necessary cognitive tools.

Third, reflecting on new information enables leaders to push boundaries on learning. Reflection has emerged as an advantageous tool in leader development (London, 2002), from reflecting on one's life story or narrative to make meaning and glean awareness of values, beliefs, and self (Avolio, 2005; Shamir & Eilam, 2005; Sparrowe, 2005) to integrating after-action reviews into action learning teams (DeRue, Nahrgang, Hollenbeck, & Workman, 2012). For example, active reflective experiences are ones in which a leader deliberates on the intent of a particular experience, their behavior, behavior of others, outcomes (intended and achieved), lessons of the experience, and actions to improve future development and performance (Baird, Holland, & Deacon, 1999). Reflection can be facilitated through intrapersonal journaling or interpersonally with an executive coach or with team members. Leaders with active reflection skills will better notice and learn insights from developmental opportunities and gain self-awareness (London, 2002). Leaders with strong metacognitive skills reflect on their thoughts over the course of everyday leadership challenges, intense stretch experiences, or formal leadership training and, therefore, possess a strong ability to develop.

In summation, metacognitive skills impact a leader's capacity to develop by increasing self-awareness, monitoring, and regulation of thoughts and emotions (Dinsmore, Alexander, & Loughlin, 2008; Ridley, Schutz, Glanz, & Weinstein, 1992). Increasing awareness helps leaders correctly evaluate their current skills and access developmental areas that are difficult to accept. With appropriate knowledge of their current skill set, leaders will have an easier time integrating new skills during leader developmental programs to improve those areas (Hannah & Avolio, 2010).

Leaders have many opportunities during everyday work to observe thinking patterns and learn about learning. However, more often than not, leaders get so focused on their action-oriented jobs that they overlook opportunities for reflection. It is difficult to learn from experiences if leaders are busy performing and clearing problem areas (Day, 2010). At the opposite extreme, reflection has to be brought to an end or else maladaptive rumination can inhibit leaders from progressing (Mor & Winquist, 2002). Such leaders risk spending excessive time wandering selfawareness paths of the mind, trapped in unnecessary analyzing. Leaders with strong metacognitive skills will know how to snap their focus into action mode and when to stop to monitor their thinking patterns to maximize leader development. Strong metacognitive skills assist in the readiness to develop because leaders progress in developmental opportunities without falling into an overthinking trap.

Specifically, metacognitive skills can be developed through ongoing practice (Avolio & Hannah, 2008). Example practices for developing metacognitive skills include monitoring understanding, evaluating effectiveness of learning, and understanding cognitive strengths as well as weaknesses (Schraw & Dennison, 1994). For instance, meta-cognitive skills could be improved by asking oneself questions about the quality of developmental strategies, such as "How am I doing at developing my leadership?" or "Am I using this developmental strategy effectively?" As mentioned, leaders can also practice self-development techniques such as journaling and conversation techniques like debriefing.

Mindfulness. In their initial theorizing, Hannah and Avolio (2010) assert the importance of self-concept clarity for LDR. Self-concept clarity refers to "the extent to which self-beliefs are clearly and confidently defined, internally consistent, and stable" (Campbell et al., 1996, p. 141). We propose mindfulness as a new component of the ability to develop pillar of LDR, as it goes beyond general mental ability to achieve the necessary clarity and complexity in cognitive structures.

Mindfulness refers to a present-moment awareness with an observing, nonjudging stance (e.g., Bishop et al., 2004; Mikulas, 2011; Reb, Narayanan, & Chaturvedi, 2014). Researchers have empirically linked mindfulness to several beneficial leader development outcomes. Leaders experience high stress in the world due to demanding hours, decision making, and managing many employees and work responsibilities. Handling stress is crucial for developmental of leadership skills (Campbell, Baltes, Martin, & Meddings, 2007). Research has found a positive association between mindfulness and greater physical and psychological well-being and stress reduction (Brown, Ryan, & Creswell, 2007; Chiesa & Serretti, 2010). Specifically, Roche, Haar, and Luthans (2014) found that mindfulness benefits leader well-being across three levels of leaders (i.e., junior managers, middle managers, and senior managers). At the dyadic level, mindfulness can improve selfregulation in behavior to order to navigate social relationships better, enhance well-being, and increase task performance (Glomb, Duffy, Bono, & Yang, 2011). In a longitudinal field experiment, Yeow and Martin (2013) found that self-regulation increases led to greater leader effectiveness as well as financial performance. In summary, mindfulness is a beneficial addition to the ability to develop pillar of LDR because it can improve leaders' well-being, reduce stress, and facilitate selfregulation; all of these outcomes boost the chances for successful leader development.

There are three main dimensions to definitions of mindfulness, and each is central to the ability to develop leadership: (1) present-moment awareness, (2) nonjudgmental acceptance of the present moment, and (3) sensitivity to context and perspective. First, to be aware of the present moment means to perceive, feel, and think of the experience of being in the moment. Similarly, metacognition is a higher order skill of being aware of awareness. Metacognition uses awareness for the specific goal of reflection. However, unlike metacognition, mindful awareness does not require any purposeful action, or goal, outside of being aware of the present (Brown & Ryan, 2003). Mindful awareness is the act of witnessing or observing the present. This present-moment awareness facet helps leaders focus on the critical learning outcomes of their current experience.

Countless tasks, decisions, and stressors bombard leaders and linger in their mind throughout the day. Ordinary annoyances throughout the day could distract the leader away from focusing on developmental opportunities. A leader high in mindfulness would refocus towards leader developmental plans during high stress instead of forgetting about orientations towards developmental opportunities. For example, a leader walks into a meeting knowing that his/her developmental goal is to facilitate perspectives from unheard employees. In the heat of a debate in the meeting, he/she could be preoccupied with arguing for his/her position. However, a leader high in mindfulness refocuses to the present experience and refrains from distracting behaviors. He/she then brings his/her attention toward pulling ideas from the rest of the group. In essence, a mindful leader will be able to move attention quickly and fully back to focusing on their developmental goals. LDR increases when leaders can let go of irrelevant worries and adjust their attention to the awareness of the present moment. Present-moment awareness allows leaders to learn from situations instead of being distracted by emotional, ego-threatening, or trivial circumstances.

The second facet of mindfulness, nonjudgmental acceptance of the present moment, engages leaders to accept the present moment despite positive or negative attributes. The leader chooses to accept the present moment as a reality of the experience, instead of spending vital energy being frustrated that a negative event has occurred. Roche et al. (2014) suggest that mindfulness plays a role in viewing stressful situations without the rumination that disables leaders from focusing on the true issue at hand. Learning experiences can be extremely difficult to accept due to harsh feedback, failure, or cognitive demands. The acceptance facet of mindfulness provides the leader with the capacity to utilize harsh feedback toward constructive criticism or perceive failure as a tool for development. If a leader can accept the present experience nonjudgmentally, then the leader can use the experience for developmental purposes instead of becoming defensive or distracted away from learning.

Finally, mindfulness enables a leader to be sensitive to context and perspective and to absorb learning experiences fully. Situational awareness is essential for leader development because leadership effectiveness is contextual (e.g., Fiedler, 1964). For example, the same leadership behavior (e.g., task structuring) may succeed in one situation (e.g., ambiguous task) yet fail in another situation (e.g., highly intelligent group members). Through mindfulness, leaders will be able to gather greater contextual cues to aid in connecting learning experiences. By recognizing contextual patterns, the mindful leader will be better positioned to adapt his/her leadership behaviors to the situation. Whereas some leaders may overlook challenges as a self-defeating struggle, the mindful leader will see other cues embedded in the context providing opportunities to develop. Therefore, leaders high in mindfulness will fully absorb leader development opportunities.

One of the most straightforward ways to develop mindfulness is through a meditation practice. Mindfulness-based stress reduction programs start from a minimum of 8 weeks to improve affective processes and increase mindfulness (Chiesa & Serretti, 2010). However, this requires a great amount of time and financial resources. Short durations of

simple mindfulness meditation trainings may also be effective as positive benefits have resulted from as little as 4 days of 20-min mindfulness meditation sessions (Zeidan, Johnson, Diamond, David, & Goolkasian, 2010). This method is as simple as focusing on one's breath with eyes closed for 10–20 min, once a day (Wallace, 2006). Alternatively, mindfulness can be developed in everyday life outside of a formal practice. Leaders can practice an attitude of accepting experience without value judgment, regardless of good outcome or bad outcome (Brown & Ryan, 2003). With the nonstop daily workload of a leader, mindfulness can be practiced by merely taking a short break and then resuming work by focusing on one developmental goal at a time.

Mindfulness enables leaders to accept present experiences for what they are and from there take an active approach to reacting effectively. By accepting and spending energy to be aware of the totality of the present moment, rumination is reduced to allow for regulating of developmental focus in challenging, dynamic, and volatile situations (Weick & Quinn, 1999; Dane & Brummel, 2014). Therefore, we propose mindfulness as a new and impactful component of ability to develop leadership.

6.2.2 Motivation to Develop as a Leader

In addition to ability to develop, those high in LDR are also motivated to develop as a leader. Motivation to develop refers to "the desire to develop or improve leadership skills and attributes through effort" (Maurer & Lippstreu, 2005, p. 5). Leaders possessing a high-intensity motivation to develop seek out stretch experiences and overcome setbacks (Reichard, Walker, Putter, Middleton, & Johnson, 2016). Given the longitudinal nature of leader development, such high levels of effort and persistence are certainly required to stay the course.

According to Ryan and Deci's (2000) self-determination theory, motivation can vary not only in terms of level of intensity but also in type ranging from amotivation (i.e., no intent to act) to various types of extrinsic motivation (i.e., external to integrated) and to intrinsic motivation (i.e., acting due to inherent interest in activity). In fact, in one of the initial publications on LDR, Hannah and Avolio (2010) referred to a leader's interest as "an intrinsic motivational orientation accompanied by psychological arousal in relation to a particular topic" (p. 1182), with that topic of interest being leadership and leader development. However, oftentimes the activities required to develop leadership are not inherently interesting, so the various types of extrinsic motivation to develop are needed to deconstruct LDR.

Although all are external to the activity itself, the types of extrinsic motivation vary based on the degree of autonomy (Ryan & Deci, 2000). With the lowest degree of autonomy, external regulation is the type of motivation traditionally associated with extrinsic motivation, where motivation is controlled through compliance to external rewards and punishments. Although some leaders may be motivated to lead or develop leadership as a result of the gains in power or rewards (Chan & Drasgow, 2001), this is unlikely to be sustainable over the long haul of leader development particularly given the complex nature of learning to lead (Day, 2010).

Instead, given the role of agency and ownership inherent to successful leader development (DeRue & Ashford, 2010; Hannah & Avolio, 2010), it requires autonomously regulated motivation. Again, according to self-determination theory (Ryan & Deci, 2000), toward the autonomously regulated end of the extrinsic motivation continuum are identified regulation (e.g., developing as a leader is personally significant and consciously valued) and integrated regulation (e.g., developing as a leader is congruent with who I am). When applied to LDR, we argue that the type of motivation needed is autonomously regulated motivation including identified, integrated, or intrinsic motivation to develop as a leader.

As with the ability to develop pillar, we deconstruct two components of motivation to develop. The first—learning goal orientation—has previously been argued as a key LDR dimension (Avolio & Hannah, 2008; Culbertson & Jackson, 2016) and the second—leader development psychological capital—is an extension of the prior discussion of the role of leader developmental efficacy in LDR.

Learning goal orientation. A leader's approach to growth opportunities is derived from their implicit theory of ability and results in at least two distinct types of goal orientation (Dweck & Leggett, 1988). First, performance goal orientation stems from the implicit theory of ability about leadership as fixed. Individuals with this mindset believe that leaders are "born" with the traits and qualities necessary for leadership. Leaders with these beliefs approach leader development opportunities with an aspiration to validate their ability (VandeWalle & Cummings, 1997; Dweck, 1986). This approach focuses leaders on either proving their expertise or avoiding failure, which has a negative impact on self-regulatory processes (Bouffard, Boisvert, Vezeau, & Larouche, 1995) and runs counter to motivation to develop leadership.

Alternatively, a learning goal orientation stems from the implicit belief that leadership is a developable, malleable skill. From this perspective, leaders are "made." Leaders, who are high in learning goal orientation, view leadership challenges as opportunities for development, growth, and improvement (VandeWalle & Cummings, 1997). Leaders with this orientation are more likely to create selffocused goals and adapt working styles for demanding situations (Button, Mathieu, & Zajac, 1996; Farr, Hofmann, & Ringenbach, 1993).

The dominant type of goal orientation a leader endorses affects a wide range of leader processes that enhance LDR and leader development outcomes, namely feedback. Goal orientation anchors feedback behaviors for improvements (VandeWalle & Cummings, 1997). Feedback is vital to leader development because it provides unique emerging information contributing towards goal progress (Locke & Latham, 2002). If a leader pursues performance goals, feedback will be difficult to manage as results will determine proof of success or proof of failure. However, if a leader pursues learning goals, then feedback will be interpreted as an opportunity for improvement because the leader seeks challenge and development. Seeking proactive feedback means the leader actively facilitates their own developmental process. A learning goal orientation, thus, is meaningful for LDR given that feedback is a crucial element for leader development (London, 2002).

There are several ways that leaders and program administrators can cultivate learning goal orientations to boost LDR. Organizations should stimulate learning

goal orientation in their leadership developmental programs beginning with program messaging. Ensuring that these programs are spaces of learning, not maximizing performance, is a good start. On a more individual leader level, self-awareness of one's implicit assumptions about leadership and leader development is an effective starting point. Empirical research has established that approximately 30% of leader role occupancy is attributable to genetics (Arvey, Rotundo, Johnson, Zhang, & McGue, 2006; Arvey, Zhang, Avolio, & Krueger, 2007), leaving the vast majority of leader emergence and effectiveness open to development and environmental influences. Beyond understanding the research evidence, a more personal reflection on the origin and development of values, beliefs, and skills through the examination of one's narrative (Shamir & Eilam, 2005; Sparrowe, 2005) or other leaders' life stories can aid in uncovering the developmental nature of leadership. Projecting one's personal narrative into the future through framing goals in terms of increasing knowledge and experiencing challenge can further facilitate a learning orientation (Seijts, Latham, Tasa, & Latham, 2004). Motivational interviewing, a method of exploring resistance (Miller & Rollnick, 2002), is a tangible tool coaches can use to facilitate autonomous functioning through self-awareness of behavior, values, and fundamental assumptions of change (Markland, Ryan, Tobin, & Rollnick, 2005). Finally, training leaders to pursue feedback with an open, challenge-seeking attitude can increase learning goal orientation (Payne, Youngcourt, & Beaubien, 2007). Leaders high in LDR will seek out feedback outside of leader development programs. Furthermore, with growth-oriented mindsets, leaders can use this sought-out feedback for integration into their development.

Leader Development Psychological Capital. Beyond human capital (e.g., explicit and tacit knowledge) and social capital (i.e., networks of relationships), positive psychological capital is a source of competitive advantage in organizations (Luthans & Youssef, 2004). Positive psychological capital, or PsyCap, is referred to as a state-like, motivational propensity (Luthans, Avolio, Avey, & Norman, 2007) and, thus, PsyCap for leader development is proposed as a key component of the motivation to develop pillar of LDR (Pitichat, Reichard, Kea-Edwards, Middleton, & Norman, 2017).

As a domain-specific construct, PsyCap has been anchored to a variety of domains including cross-cultural interactions (Dollwet & Reichard, 2014), academics (Luthans, Luthans, & Avey, 2014), and—most frequently—the workplace (Luthans et al., 2007). Workplace PsyCap has demonstrated consistent positive relationships with desired outcomes including job satisfaction and performance (Avey, Reichard, Luthans, & Mhatre, 2011a, b). Given the context-specific nature of the PsyCap construct, we propose conceptualization of PsyCap to the context of leader development and define psychological capital for leader development, or LD PsyCap, as "(1) having confidence ([self-]efficacy) to take on and put the necessary effort to succeed at challenging *leader development* tasks; (2) making a positive attribution (optimism) about succeeding now and in the future *in terms of developing as a leader*; (3) persevering toward *leader development* goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience)

to attain success at *leader development*" (adapted from Luthans, Youssef, & Avolio, 2007, p. 3; italicized words added to reflect leader development domain).

As reflected in this definition, PsyCap is a higher order, core construct consisting of the four lower order constructs of self-efficacy, hope, optimism, and resilience (Luthans et al., 2007). As one of four components of LD PsyCap, leader developmental efficacy was discussed in the initial theorizing regarding LDR (i.e., Avolio & Hannah, 2008; Hannah & Avolio, 2010). Aligned with Bandura's (1997) learning efficacy, leader developmental efficacy refers to "a domain-specific, state-like individual difference" that reflects a leader's belief in his/her ability to develop leadership knowledge or skills (Reichard et al., 2016, p. 3). In a series of three studies, Reichard et al. (2016) found that leader developmental efficacy predicted intentions to engage in leader self-development activities (e.g., seeking stretch opportunities) beyond past leader development. Likewise, intentions to develop as a leader, in turn, predicted implementation of leader development activities a month later. Finally, leader developmental efficacy was associated with positive change in leader efficacy over the course of formal training. These results provide initial empirical support for the veracity of leader developmental efficacy being a significant component of the motivational pillar of LDR.

LD PsyCap goes beyond self-efficacy to include hope, optimism, and resilience for leader development. Despite a variety of conceptualizations of the construct "hope" (Reichard, Avey, Lopez, & Dollwet, 2013), the most dominant definition refers to hope as "a positive motivational state that is based on an interactively derived sense of successful (1) agency (goal-directed energy) and (2) pathways (planning to meet goals)" (Snyder et al., 1991, p. 287). Anchored to the domain of leader development, hope refers to the agency, perceived autonomy, and pathways a leader possesses regarding developmental goals. High levels of agency reflect the determination to identify and achieve leader development goals. When one strategy for leader development becomes blocked, high levels of pathways provide alternative plans to pursue.

Similar to the positive undertones of hope, optimism generally refers to the ability to attribute positive events to the present and the future, whereas negative events are categorized as temporary anomalies (Scheier & Carver, 1992). More generally, optimism is the expectation for positive future outcomes (Seligman, 1998). For example, we theorize that leaders high in LD optimism will attribute positive feedback as a product of behaviors or personal qualities and will anticipate more positive feedback in the future. Conversely, upon receiving negative feedback the leader will likely still view the future as positive and attribute the feedback as a temporary state and useful opportunity to develop. Taking a realistic optimism perspective can lead to many positive outcomes including persistence (Luthans et al., 2007). Those high in LD optimism will believe that leader development success is within their control.

The final component of LD PsyCap is resilience. Borrowing from Masten (2001; Masten & Reed, 2002), resilience is viewed as the capacity to respond favorably to both positive (e.g., increased expectations and responsibility) and negative (e.g., conflict, setbacks, and failures) events. Research supports the notion that resilient

individuals respond to these positive and negative events to not only reach prior levels of success and capabilities, but to also rise to higher levels than before (King, Newman, & Luthans, 2016). Similarly, posttraumatic growth describes the process of personal change that emerges from tragic moments that disrupt the sense of self and requires initiating new, intrinsically meaningful goals (Davis & Nolen-Hoeksma, 2009; Tedeschi & Calhoun, 2004). Applied to the domain of leader development, someone high in resilience would be able to respond to setbacks (e.g., negative interaction with a follower) to learn from them and continue striving towards leader development. Resilience is not only necessary when faced with setbacks but also with successes (e.g., promotion to a higher leadership position), which may bring additional pressure, higher expectations, and anxiety. Resilience allows the leader to bounce back from success or failure and continue on the leader development journey.

In summary, leader developmental efficacy, hope, optimism, and resilience compose LD PsyCap, contribute to the motivation to develop pillar of LDR, and can be developed in preparation for or during a leader development program or experience (Luthans, Avey, Avolio, & Peterson, 2010). Specifically, efficacy can be developed through mastery experiences (e.g., successfully completing successively more challenging leader development attempts), vicarious learning (e.g., observing a similar other succeed at leader development), and social persuasion (e.g., positive, constructive, and instructional feedback from a respected other). Using effective goalsetting techniques such as stepping, stretch goals, re-goaling, and contingency planning facilitates hope. Optimism can be increased by reframing past events (e.g., examining one's narrative) and setting realistic future leader development goals. Finally, building assets (e.g., support factors such as developmental networks) and reducing risk factors (e.g., poor team dynamics) grow resilience.

6.3 Support for Leader Development

Beyond individual differences in ability and motivation to develop, the context in which developing leaders are embedded plays a powerful role in aiding or impeding leader development. Strong abilities and highly motivated individuals are more likely to succeed in their endeavor to develop as a leader *when* they are embedded in an environment supportive of that development (another perspective on the role of social support for an individual is discussed in detail later in this volume in Chapter 12). The third pillar of LDR is support for leader development, which was initially referred to as "organizational developmental readiness" (Hannah & Avolio, 2010, p. 1186). In this section, we deconstruct support for leader development into the traditionally discussed component of learning culture and a second newly proposed component of developmental networks.

Learning culture. A learning organization's culture emphasizes values of "learning, innovation, experimentation, flexibility, and initiative" (Yukl, 2009, p. 323). Orienting oneself to developing as a leader, rather than only performing, is

inherently risky because of the likelihood of failure when experimenting with new leadership approaches. An essential component of a learning culture is psychological safety, or a "shared belief that the team is safe for interpersonal risk taking" (Edmondson, 1999, p. 354). Edmondson argued that psychological safety facilitates learning because it alleviates concern about reactions to leader development attempts that have the potential to result in embarrassment or threat. In a psychologically safe learning culture, others will not embarrass, reject, or punish a leader for attempting to develop. Two key facets of a learning culture are (1) available resources for leader development and (2) supervisor support for leader development.

First, a learning culture supportive of LDR is enabled by the availability of resources for leader development. Lacking adequate opportunities and resources stunts growth. In a learning organization, leaders have a "playground" in which to practice their leadership behaviors. They have time available to focus on development rather than being bogged down in a high-performance culture. Leaders in a learning culture have access to information and tools needed to help them grow, such as information on the latest evidence-based approaches to effective leadership (Reichard & Johnson, 2011). Whether a leader has access to resources and opportunities to lead may be contingent on their direct supervisor.

Supervisor support has a large impact in creating a safe learning culture. Supportive supervisors communicate the importance of ongoing development, encourage subordinates to participate in leader development opportunities, and provide time at work to support learning (Thompson & Reichard, 2016). Supervisors high in individualized consideration and inclusiveness foster psychological safety and provide needed support for leader development. Individualized consideration means the supervisor understands the target leader's developmental needs and offers work tasks or other developmental opportunities to fulfill those needs (Reichard & Johnson, 2011). In fact, leaders who treat their followers with individualized consideration and other transformational leadership behaviors positively impact followers' development (Dvir, Eden, Avolio, & Shamir, 2002). Likewise, inclusiveness speaks to the supervisor's availability and accessibility, as well as whether they invite input and model development (Edmondson, 1999). Supervisors facilitate psychological safety when they construe work as learning problems, acknowledge their fallibility, and model curiosity by asking lots of questions. Inclusiveness and psychological safety result in learning from failures (Hirak, Peng, Carmeli, & Schaubroeck, 2012). Taken together, a psychologically safe, learning culture composed of available resources and supervisor support for leader development facilitates LDR.

The development of a learning culture will not happen quickly and requires alignment between the organization's values, systems, and people. According to Reichard and Johnson (2011), organizations can promote leader development by intentionally emphasizing development in organizational systems. Specifically, human resources processes relating to selection, training, and performance appraisal can facilitate a learning culture. For example, organizations communicate that

learning and development are expected when (a) providing training programs targeting developing leaders' metacognitive skills, goal-setting skills, and selfmanagement skills and (b) implementing performance appraisal systems that financially reward achievement of developmental goals. Organizational systems aligned with leader development instill group norms of learning, responsibility, and openness. Most importantly, organizational systems should make it clear to developing leaders that the organization is taking intentional actions to create a learning culture.

Developmental networks. A main facet of the learning culture is supervisor support. Support from others is a positive resource that protects an individual during adverse events (Cohen & Wills, 1985). Social support is a highly valued resource for a leader approaching stretch experiences and developmental opportunities. However, it is not just the supervisor who can support a leader's development. Social support can come from various people like mentors, coworkers, and friends. Therefore, we offer developmental networks as a new component of the support pillar of LDR. Based on the mentoring literature, Higgins and Kram (2001) defined a developmental network as "a set of people that a protégé names as taking an active interest in and action to advance the protégé's career by providing developmental assistance" (p. 258). This perspective reconceptualizes mentoring as a network of people, referred to as "developers" (e.g., mentor, coach, peer, supervisor, spouse, or friend), that offer different types of career support, psychosocial support, and role modeling.

Three central concepts of the developmental network perspective have implications for LDR: (1) the developmental perspective itself, (2) the diversity of the network, and (3) the strength of the relationships that make up the network (Dobrow, Chandler, Murphy, & Kram, 2012). First, the premise of the network perspective is that multiple relationships in a leader's network will offer different value. Relying on a single developer limits the amount and type of knowledge available to the developing leader, which may result in groupthink or uninformed decision making. Additionally, if the lone developer changes jobs, moves, or otherwise becomes unavailable, the leader may be left without any guidance. For these reasons, a network of multiple developers who are actively interested in facilitating the leader's development is more desirable. As such, the developmental network perspective forges a more general understanding of who are the developers in a leader's life. By widening the array of developers to any individual, regardless of expertise, leaders can learn from a range of others from experienced supervisors to tech-savvy young employees.

However, the number of developmental relationships is not as critical as diversity in the types of relationships. Therefore, the second key concept of the developmental network perspective is its emphasis on diverse developers for a multitude of purposes for leaders. A variety of support areas allows the leader to gain distinct support tailored for a variety of situations. For example, a leader may consult a senior mentor for a different reason than the leader would consult a peer. Having multiple developers gives leaders a variety of options for support from diverse levels of expertise. Having different perspectives for support gives the leader an advantage in being prepared for development. Leaders with expansive, diverse developmental networks gain a competitive edge in LDR by having many different areas of support and guidance. Seibert, Sargent, Kraimer, and Kiazad (2016) suggest that having a developmental network mediates the relationship between challenging developmental experiences and leader effectiveness. The larger the playing field for finding support, the more readily leaders can bounce back from failures with support and find creative guidance in times of challenge.

Lastly, this perspective describes different strengths of bonds between leaders and those in their developmental networks. Having both weak and strong ties is beneficial for a leader's development. Weak ties allow opportunities for leaders to practice novel leadership techniques without worrying about ruining their reputation, whereas strong ties allow for individualized feedback from a trusting relationship (Higgins & Kram, 2001). For example, strong ties help leaders gain personalized feedback since the strong tie developer has a closer relationship and thus has a deeper knowledge of strengths and weaknesses. On the other hand, weak ties help leaders receive honest feedback about behavior without threatening the relationship. Also, because of the multiple exposures to diverse people, weak ties help the leader connect dots more creatively between ideas.

Both leaders and organizations can facilitate developmental networks to foster LDR. Leaders can take an active interest in forming their developmental networks with developers who have key attributes to increase their leader development. Ghosh, Haynes, and Kram (2013) suggest that leaders forming a developmental network should have three additional features for their network. First, individuals higher in the company hierarchy are included in the network to offer insight based on previous challenges. Second, developers should harmonize to have shared goals, knowledge, and respect as to not have conflicting demands on the leader (Gittell, 2002). Lastly, developers should have trusting relationships with the leaders to help leaders be receptive to support (Carmeli, Ben-Hador, Waldman, & Rupp, 2009). Finally, organizations can strengthen leaders' developmental networks through formal mentoring and coaching programs and by allowing informal interactions among leaders and those identified as developers.

6.4 Reconstructing Leader Developmental Readiness

Now that we have deconstructed LDR into its individual parts, we turn to reconstructing it by theorizing interactions among the three pillars (see Fig. 6.2). The suggestion that LDR components may interact was first given by Hannah and Avolio (2010), who implied that such interactions will drive our understanding of LDR as a higher order construct. In this section, we provide a sampling of the possible interactions among component parts to illustrate how they work together **Fig. 6.2** Reconstruction: interactions among leader developmental readiness

components



to maximize leader development outcomes and, thus, elaborate and develop new theory. Each of the theorized interactions described reflects an agenda for future empirical research.

6.4.1 Ability to Develop and Motivation to Develop

To begin, we argue that the pillars of ability to develop and motivation to develop will interact to yield LDR and, thus, improve leader development outcomes. As an example, mindfulness as an ability to develop and PsyCap for leader development as a form of motivation to develop are expected to interact to maximize LDR and leader development outcomes (see Fig. 6.3). With an increased ability to refocus into the present experiences with an accepting attitude (i.e., mindfulness), a leader may be able to better exercise PsyCap for leader development. For example, imagine a leader is given a stretch experience of an upcoming business proposal on a short deadline. This developmental opportunity will be worthwhile if he/she can stay focused and utilize mindfulness to be aware of these stressful experiences, accept the stress nonjudgmentally, and then reallocate attention toward the developmental opportunity. The leader then has the opportunity to flex positive psychological capital skills, like examining multiple pathways to achieve a desired outcome (i.e., hope). Accepting the present stressful experience and being aware of one's own strengths under stress also enhance self-efficacy. By refocusing attention on what is critical within the present experience, leaders can conserve energy for only the process of development. This enables the leader to bounce back (resilience) from small failures that would normally stunt developmental progress. Lastly, with the attention on the developmental opportunity, personal strengths, and internal processing, the leader could utilize greater optimistic tools to push motivations further. This provides

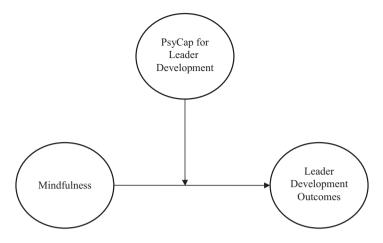


Fig. 6.3 Interaction between ability to develop (mindfulness) and motivation to develop (PsyCap for LD)

but one example of the multiplicative effects of ability to develop and motivation to develop on overall LDR and leader development outcomes that should be empirically examined in future research.

6.4.2 Ability to Develop and Support for Development

Next, the combination of ability to develop and support for development is reconstructed. A strong support system will enable leaders to fully utilize their LDR abilities. A strong support for development will help those leaders high in ability to develop to fully reach their potential. As an example, strong metacognitive ability will interact with developmental network support to yield positive leader development outcomes (see Fig. 6.4). Leaders high in metacognitive ability will be better prepared to engage in developmental conversations with coaches, mentors, and peers. This is because strong metacognitive ability allows for deeper reflective conversations. If a leader has weak metacognitive ability, but high developmental network support, then a bulk of time will be devoted towards teaching the leader how to reflectively think. It will save time and financial resources for organizations if leaders already possess strong metacognitive ability when entering developmental conversations with their supportive network. On the other hand, if a leader has strong metacognitive ability but low developmental network support, then leaders can become stuck in their own mind without externalizing their developmental goals within the organization. These leaders would lack the potential feedback from a supportive ally that could aid in boosting LDR. If leaders possess both strong metacognitive ability and high developmental network support, then they can access

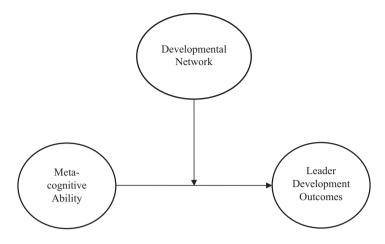


Fig. 6.4 Interaction between ability to develop and support for development

proactive reflective conversations from the diverse network of supporters and thus maximize LDR and leader development outcomes. Beyond metacognitive ability and developmental networks, we expect other components of ability to develop and support for development to interact to facilitate overall LDR and encourage future researchers to test these interactions.

6.4.3 Motivation to Develop and Support for Development

The pillars of motivation to develop and support for development build upon each other to boost overall LDR. To demonstrate, a psychologically safe learning culture amplifies a leader's learning goal orientation to maximize LDR and, thus, leader development outcomes (see Fig. 6.5). Highly critical cutthroat performance cultures are likely to yield performance goal orientations and squash learning goal orientations. If a leader's manager primarily utilizes transactional forms of exchange as part of a performance culture, the leader could get too focused on outcomes, not the process of development. This can lead to focusing on success as a validation of ability, not as a challenge to develop future skills. On the other hand, if an organizational culture emphasizes challenge instead of rewards, then the leader will be more likely to frame stretch experiences as learning opportunities. In a learning culture, peers, managers, and mentors can be more intentional with instituting a learning goal orientation with a leader. Learning cultures create environments for leaders to feel psychologically safe to explore interpersonal risk taking. Leaders will be more likely to engage in fostering a learning goal orientation if the environment not only promoted it in their culture but even rewarded it. This interaction among learning culture and learning goal orientation is only one of several examples of how

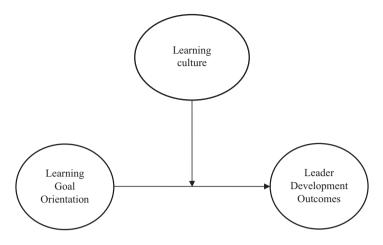


Fig. 6.5 Interaction between motivation to develop and support for development

the motivation to develop and the support for development pillars are expected to interact to influence overall LDR. Future research should examine these predicted interactions.

6.4.4 Ability to Develop, Motivation to Develop, and Support for Development

LDR and leader development outcomes are maximized when all three LDR pillars are strong. To demonstrate this, cognitive complexity (ability to develop), autonomous motivation (motivation to develop), and learning culture (support for development) can all interact for a unifying LDR and optimal leader development outcomes (see Fig. 6.6). Cognitive complexity can be an instrumental tool for evaluating and absorbing novel information for productive work when an individual has the autonomous motivation to not only value his/her development but also feel a sense of identity as a developing leader. Autonomous motivation creates proactive stimulation for cognitive complexity to be utilized within an organization emphasizing learning. Lastly, leaders will have the preparation required and the ingredients available for growth when a culture that accentuates learning is coupled with cognitive complexity and autonomous motivation. Leaders whose supervisors support them with resources for growth will be more empowered to exercise autonomy. The three pillars of LDR thus interact to maximize leader development outcomes.

To facilitate optimal LDR, organizations must seek to both strengthen and balance the three LDR pillars. First, more attention must be spent on resources to cultivate each pillar of LDR. This involves suggested techniques like integrating motivational interviewing into managerial coaching or learning goal-setting tech-

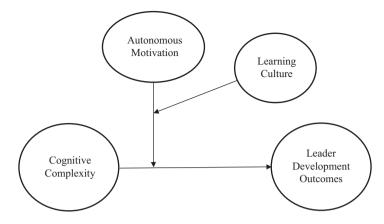


Fig. 6.6 Interaction between ability to develop, motivation to develop, and support for development

niques to enhance LD PsyCap. Second, organizations can monitor and balance the LDR pillars in order to materialize the complementary benefits. Routinely collecting data on the progress across the three LDR pillars (how well are they developing ability, promoting proactive motivation, and providing the structures for support) can provide a useful feedback system for organizations. When the three LDR pillars are strong, organizations can expect positive leader development throughout the organization.

6.5 Conclusion

Leader developmental readiness is one of the few theories of leader development that provides a framework for future empirical research. LDR is defined as having three pillars, ability to develop, motivation to develop, and support for development, and thus provides a framework for conceptualizing components within each pillar. The constructs composing each of these three pillars are not fixed, but should be viewed as flexible within the LDR framework. In other words, in addition to the original authors' initial proposal regarding components within each pillar (e.g., Hannah & Avolio, 2010), additional components should be theorized and empirically tested. In this deconstruction we reviewed various components of LDR, such as metacognitive ability, learning goal orientation, and learning culture, which each has a long and rich research history and was initially associated with LDR. Likewise, we elaborated on extant theory to argue for new components of LDR, including mindfulness, psychological capital for leader development, and developmental networks. In this way, the LDR pillars provide a flexible overarching framework for future theory development, elaboration of further component parts, and discussion of the interactions among those parts.

Finally, through reconstruction of its interacting component parts, LDR is conceptualized as a higher order construct that predicts leader development outcomes. We provide a sampling of interactions among the three LDR pillars to demonstrate LDR reconstruction and the understanding that one pillar should not be considered in isolation. As noted above, the various interactions between the LDR components described serve as examples ripe for future research. In addition, future research can examine whether one of the three pillars is most crucial for leader development; if particular component interactions do, in fact, maximize overall LDR and ultimately leader development success; and whether there are certain threshold levels of various components necessary for LDR to facilitate development. Our understanding of LDR as a framework for leader development has only just begun, yet future applied research has the potential to transform the practice of leader development.

References

- Arvey, R. D., Rotundo, M., Johnson, W., Zhang, Z., & McGue, M. (2006). The determinants of leadership role occupancy: Genetic and personality factors. *Leadership Quarterly*, 17, 1–20.
- Arvey, R. D., Zhang, Z., Avolio, B. J., & Krueger, R. F. (2007). Developmental and genetic determinants of leadership role occupancy among women. *Journal of Applied Psychology*, 92(3), 693–706.
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. (2011a). A review, synthesis and metaanalysis of positive psychological capital. *Human Resource Development Journal*, 22(2), 127–152.
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011b). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22(2), 127–152.
- Avolio, B. J. (2005). *Leadership development in balance: Made/born*. Mahwah, NJ: Lawrence Erlbaum.
- Avolio, B. J., & Hannah, S. T. (2008). Developmental readiness: Accelerating leader development. Consulting Psychology Journal: Practice and Research, 60, 331–347.
- Avolio, B. J., Reichard, R. J., Hannah, S. T., Walumbwa, F. O., & Chan, A. (2009). A metaanalytic review of leadership impact research: Experimental and quasi-experimental studies. *Leadership Quarterly*, 20, 764–784.
- Baird, L., Holland, P., & Deacon, S. (1999). Learning from action: Imbedding more learning into the performance fast enough to make a difference. *Organizational Dynamics*, 27(4), 19–32.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W.H. Freeman and Company.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D. & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11, 230–241.
- Black, H., Soto, L., & Spurlin, S. (2016). Thinking about thinking about leadership: Metacognitive ability and leader developmental readiness. In R. J. Reichard & S. E. Thompson (Eds.), *Leader developmental readiness: Pursuit of leadership excellence: New Directions* (Vol. 149, pp. 85–96). New York: Wiley.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822.
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18, 211–237.

- Bouffard, T., Boisvert, J., Vezeau, C., & Larouche, C. (1995). The impact of goal orientation on self-regulation and performance among college students. *British Journal of Educational Psychology*, 65, 317–329.
- Button, S. B., Mathieu, J. E., & Zajac, D. M. (1996). Goal orientation in organizational research: A conceptual and empirical foundation. *Organizational Behavior and Human Decision Processes*, 67, 26–48.
- Campbell, M., Baltes, J. I., Martin, A., & Meddings, K. (2007, April). The stress of leadership. Center for creative leadership. Retrieved from https://www.ccl.org/articles/white-papers/ stress-of-leadership/
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology*, 70, 141–156.
- Carmeli, A., Ben-Hador, B., Waldman, D. A., & Rupp, D. E. (2009). How leaders cultivate social capital and nurture employee vigor: Implications for job performance. *Journal of Applied Psychology*, 94(6), 1553.
- Chan, K.-Y., & Drasgow, F. (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. *Journal of Applied Psychology*, 86, 481–498.
- Chiesa, A., & Serretti, A. (2010). A systematic review of neurobiological and clinical features of mindfulness meditations. *Psychological Medicine*, 40, 1239–1252.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357.
- Culbertson, S. S., & Jackson, A. T. (2016). Orienting oneself for leadership: The role of goal orientation in leader developmental readiness. In R. J. Reichard & S. E. Thompson (Eds.), *Leader developmental readiness: Pursuit of leadership excellence: New Directions* (Vol. 149, pp. 61–72). New York: Wiley.
- Dane, E., & Brummel, B. J. (2014). Examining workplace mindfulness and its relations to job performance and turnover intention. *Human Relations*, 67(1), 105–128.
- Davis, C.G. & Nolen-Hoeksma, S. (2009). Making sense of loss, perceiving benefits, and posttraumatic growth. In C.R. Snyder & S.J. Lopez (Eds.) *Handbook of positive psychology*, (2, 641-649). New York: Oxford University Press. Chapter 61.
- Day, D. V. (2000). Leadership development: A review in context. *Leadership Quarterly*, 11(4), 581–613.
- Day, D. V. (2010). The difficulties of learning from experience and the need for deliberate practice. Industrial and Organizational Psychology, 3, 41–44.
- Day, D. V., & Dragoni, L. (2015). Leadership development: An outcome-oriented review based on time and levels of analysis. Annual Review of Organizational Psychology and Organizational Behavior, 2, 133–156.
- Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *Leadership Quarterly*, 25, 63–82.
- Day, D. V., Harrison, M. M., & Halpin, S. M. (2009). An integrative approach to leader development: Connecting adult development, identity, and expertise. New York, NY: Routledge/Taylor & Francis Group.
- DeRue, D. S., & Ashford, S. J. (2010). Power to the people: Where has personal agency gone in leadership development. *Industrial and Organizational Psychology*, 3, 24–27.
- DeRue, S. D., Nahrgang, J. D., Hollenbeck, J. R., & Workman, K. (2012). A quasi-experimental study of after-event reviews and leadership development. *Journal of Applied Psychology*, 97(5), 997–1015.
- Dinh, J. E., Lord, R. G., Gardner, W., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *Leadership Quarterly*, 25, 36–62.
- Dinsmore, D. L., Alexander, P. A., & Loughlin, S. M. (2008). Focusing the conceptual lens on metacognition, self-regulation, and self-regulated learning. *Educational Psychology Review*, 20(4), 391–409.

- Dollwet, M., & Reichard, R. J. (2014). Assessing cross-cultural skills: Validation of a new measure of cross-cultural psychological capital. *International Journal of Human Resource Management*, 25(12), 1669–1696.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45, 735–744.
- Dobrow, S. R., Chandler, D. E., Murphy, W. M., & Kram, K. E. (2012). A review of developmental networks incorporating a mutuality perspective. *Journal of Management*, 38(1), 210–242.
- Dweck, C. S. (1986). Motivational processes affecting learning. American Psychologist, 41(10), 1040–1048.
- Dweck, C. S., & Leggett, E. W. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256–273.
- Edmondson, A. (1999). Psychological safety and learning behaviors in work teams. *Administrative Science Quarterly*, 44(2), 350–383.
- Farr, J. L., Hofmann, D. A., & Ringenbach, K. L. (1993). Goal orientation and action control theory: Implications for industrial and organizational psychology. *International Review of Industrial and Organizational Psychology*, 8(2), 193–232.
- Fiedler, F. E. (1964). A contingency model of leadership effectiveness. Advances in Experimental Social Psychology, 1, 149–190.
- Garner, R., & Alexander, P. A. (1989). Metacognition: Answered and unanswered questions. *Educational Psychologist*, 24(2), 143–158.
- Ghosh, R., Haynes, R. K., & Kram, K. E. (2013). Developmental networks at work: Holding environments for leader development. *Career Development International*, 18(3), 232–256.
- Ghiselli, E. E. (1963). Intelligence and managerial success. Psychological Reports, 12, 898.
- Gittell, J. H. (2002). Coordinating mechanisms in care provider groups: Relational coordination as a mediator and input uncertainty as a moderator of performance effects. *Management Science*, *48*(11), 1408–1426.
- Glomb, T. M., Duffy, M. K., Bono, J. E., & Yang, T. (2011). Mindfulness at work. Research in Personnel and Human Resources Management, 30, 115–157.
- Hannah, S. T., & Avolio, B. J. (2010). Ready or not: How do we accelerate the developmental readiness of leaders? *Journal of Organizational Behavior*, 31, 1181–1187.
- Hirak, R., Peng, A. C., Carmeli, A., & Schaubroeck, J. M. (2012). Linking leader inclusiveness to work unit performance: The importance of psychological safety and learning from failures. *Leadership Quarterly*, 23, 107–117.
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. Academy of Management Review, 26(2), 264–288.
- Judge, T. A., Colbert, A. E., & Ilies, R. (2004). Intelligence and leadership: A quantitative review and test of theoretical propositions. *Journal of Applied Psychology*, 89(3), 542–552.
- King, D. D., Newman, A., & Luthans, F. (2016). Not if, but when we need resilience in the workplace. *Journal of Organizational Behavior*, 37(5), 782–786.
- Kitchner, K. S. (1983). Cognition, metacognition, and epistemic cognition. *Human Development*, 26(4), 222–232.
- Kovacs, K., & Conway, A. R. A. (2016). Process overlap theory: A unified account of the general factor of intelligence. *Psychological Inquiry*, 27(3), 151–177.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717.
- London, M. (2002). Leadership development: Paths to self-insight and professional growth. Mahwah, NJ: Lawrence Erlbaum.
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, 21, 41–67.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford: Oxford University Press.

- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60, 541–572.
- Luthans, B. C., Luthans, K. W., & Avey, J. B. (2014). Building the leaders of tomorrow: The development of academic psychological capital. *Journal of Leadership and Organizational Studies*, 21(2), 191–199.
- Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, *33*(2), 143–160.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. American Psychologist, 56(3), 227–238.
- Masten, A. S., & Reed, M. G. (2002). Resilience in development. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 74–88). New York, NY: Oxford University Press.
- Maurer, T. J. & Lippstreu, M. (2005, August). Differentiating motivation to lead from motivation to develop leadership capability: Relevance of 'born vs. made' beliefs. Paper presented at the meeting of the academy of management, Honolulu, HI.
- Meuser, J. D., Gardner, W. L., Dinh, J. E., Hu, J., Liden, R. C., & Lord, R. G. (2016). A network analysis of leadership theory: The infancy of integration. *Journal of Management*, 42(5), 1374–1403.
- Markland, D., Ryan, R. M., Tobin, V. J., & Rollnick, S. (2005). Motivational interviewing and self-determination theory. *Journal of Social and Clinical Psychology*, 24(6), 811–831.
- Mikulas, W. L. (2011). Mindfulness: Significant common confusions. Mindfulness, 2(1), 1-7.
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York, NY: Guilford Press.
- Mor, N., & Winquist, J. (2002). Self-focused attention and negative affect: A meta-analysis. *Psychological Bulletin*, 128(4), 638–662.
- Noe, R. A. (2013). Employee training and development (6th ed.). New York: McGraw-Hill Irwin.
- Payne, S. C., Youngcourt, S. S., & Beaubien, J. M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, 92(1), 128–150.
- Pitichat, T., Reichard, R. J., Kea-Edwards, A., Middleton, E., & Norman, S. M. (2017). Psychological capital for leader development. *Journal of Leadership and Organizational Studies*. doi: 10.1177/1548051817719232
- Pressley, M., & Ghatala, E. S. (1990). Self-regulated learning: Monitoring learning from text. *Educational Psychologist*, 25(1), 19–33.
- Reichard, R. J., & Johnson, S. J. (2011). Leader self-development as organizational strategy. *Leadership Quarterly*, 22, 33–42.
- Reb, J., Narayanan, J., & Chaturvedi, S. (2014). Leading mindfully: Two studies on the influence of supervisor trait mindfulness on employee well-being and performance. *Mindfulness*, 5(1), 36–45.
- Reichard, R. J., Avey, J. B., Lopez, S., & Dollwet, M. (2013). Having the will and finding the way: A review and meta-analysis of hope at work. *Journal of Positive Psychology*, 8(4), 292–304.
- Reichard, R. J., Walker, D. O., Putter, S. E., Middleton, E., & Johnson, S. K. (2016). Believing is becoming: The role of leader developmental efficacy in leader self-development. *Journal of Leadership and Organizational Studies*, 24, 137–156.
- Ridley, D. S., Schutz, P. A., Glanz, R. S., & Weinstein, C. E. (1992). Self-regulated learning: The interactive influence of metacognitive awareness and goal-setting. *The Journal of Experimental Education*, 60(4), 293–306.
- Roche, M., Haar, J. M., & Luthans, F. (2014). The role of mindfulness and psychological capital on the well-being of leaders. *Journal of Occupational Health Psychology*, 19(4), 476–489.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Sanchez, J. I., & Levine, E. L. (2009). What is (or should be) the difference between competency modeling and traditional job analysis? *Human Resource Management Review*, 19, 53–63.

- Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical wellbeing: Theoretical overview and empirical update. *Cognitive Therapy and Research*, 16(2), 201–228.
- Schmidt, F. L., & Hunter, J. E. (2004). General mental ability in the world of work: Occupational attainment and job performance. *Journal of Personality and Social Psychology*, 86, 162–174.
- Schmidt, F. L. (2009). Select on intelligence. In E. A. Locke (Ed.), Handbook of principles of organizational behavior (pp. 3–17). West Sussex, UK: Wiley.
- Schraw, G., & Dennison, R. S. (1994). Assessing metacognitive awareness. Contemporary Educational Psychology, 19(4), 460–475.
- Seibert, S. E., Sargent, L. D., Kraimer, M. L., & Kiazad, K. (2016). Linking developmental experiences to leader effectiveness and promotability: The mediating role of leadership self-efficacy and mentor network. *Personnel Psychology*, 00, 1–41.
- Seijts, G. H., Latham, G. P., Tasa, K., & Latham, B. W. (2004). Goal setting and goal orientation: An integration of two different yet related literatures. *Academy of Management Journal*, 47(2), 227–239.
- Seligman, M. E. (1998). What is the good life. APA Monitor, 29(10), 2.
- Shamir, B., & Eilam, G. (2005). "What's your story?" a life-stories approach to authentic leadership development. *Leadership Quarterly*, 16(3), 395–417.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60(4), 570–585.
- Sparrowe, R. T. (2005). Authentic leadership and the narrative self. *Leadership Quarterly*, 16(3), 419–439.
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1–18.
- Thompson, S.E. & Reichard, R.J. (2016). Context matters: Support for leader developmental readiness. In R.J. Reichard & S. Thompson (Eds) *Leader Developmental Readiness: Pursuit* of Leadership Excellence: New directions for student leadership (vol. 149): Jossey-bass (pp. 97-104).
- VandeWalle, D., & Cummings, L. L. (1997). A test of the influence of goal orientation on the feedback-seeking process. *Journal of Applied Psychology*, 82(3), 390–400.
- Wallace, A. B. (2006). The nature of mindfulness and its role in Buddhist meditation: A correspondence between B. Alan Wallace and the venerable Bhikkhu Bodhi. Unpublished manuscript, Santa Barbara Institute for Consciousness Studies, Santa Barbara, CA.
- Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. Annual Review of Psychology, 50(1), 361–386.
- Yeow, J., & Martin, R. (2013). The role of self-regulation in developing leaders: A longitudinal field experiment. *Leadership Quarterly*, 24(5), 625–637.
- Yukl, G. (2009). *Leadership in organizations* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Zeidan, F., Johnson, S. K., Diamond, B. J., David, Z., & Goolkasian, P. (2010). Mindfulness meditation improves cognition: Evidence of brief mental training. *Consciousness and Cognition*, 19(2), 597–605.