Certainly under the transformational leadership heading of “individualized consideration” and “intellectual stimulation” it would be considered leadership behavior. A significant question to consider is whether the leader is aware that he or she is practicing leadership. The question of whether expertise can develop outside of conscious awareness is debatable. What seems more certain is that being intentional about practice is likely to develop expertise more quickly and thoroughly than being ad hoc or unintentional about it. Thus, the role of intentionality in practice is proposed as a key process that supports the development of leadership expertise. It is noted that practice implies not merely repetitions of a behavior, but also involves implicit and explicit feedback that is obtained during and after the behavior.

SUMMARY AND IMPLICATIONS OF LEADERSHIP AS EXPERTISE

For certain leadership skills or competencies it might take less than 10 years of practice to become an expert. One example might be the knowledge and enactment of interpersonal relations, which is continuously being modified through the process of living without special support or instruction. In such a case it might be possible to reach an expert level of performance sooner than usual given the ongoing continuous exposure to interpersonal relations as part of the normal human experience. But there are two things to consider. First, there are individual differences in the preference to interact with others (e.g., extraversion versus introversion). Introverts may have a more difficult time mastering the nuances of interpersonal relations than extroverts. Second, becoming an expert leader involves more than one competency; rather, it involves mastering a complex set of evolving skills that start out relatively basic and develop into complex and interrelated competencies over time with practice. That is the essence of the web of development discussed in Chapter 3.

The next chapter examines the proposed key supporting processes in the development of an expert leader. Specifically, the development of a leader identity is seen as important to forming identity-development spirals. Identity formation is a key process in motivating one to seek out developmental experiences and practice opportunities with regard to leadership. If one does not think of oneself as a leader (or aspired to lead), then there is little motivation to develop as a leader. Self-regulation supports these proposed leader identity-development spirals as it is a key contributor to one’s persistence in and across development experiences (see Figure 12.1). Positive spirals continue to the extent that perseverance is applied toward ongoing development to more expert or even elite leader performance levels. In this manner, the individual difference of self-regulatory strength is proposed as a critical resource that contributes to identity-development spirals and the perseverance to higher levels of development as a leader.


CHAPTER

13

Identity Processes in Leader Development

BUILDING A LEADER IDENTITY

The importance of self and identity development to healthy adjustment across the lifespan is supported by the theoretical as well as the empirical literature (Leary & Tangney, 2003). Additionally, this area is recently receiving growing attention in the leadership literature (see van Knippenberg, van Knippenberg, DeCremer, & Hogg, 2004 for a review). As mentioned in our earlier chapter on identity development (Chapter 5), one’s identity is a multifaceted and dynamic composite of attributes, values, knowledge, experiences, and self-perceptions (Baltes & Carstensen, 1991). Individuals may possess sub-identities for various social roles they hold, or even identities about future desired or ideal selves (Cross & Markus, 1991). Identities can vary in salience, centrality, and the extent to which they are integrated with other sub-identities. A leader identity, in this sense, is an identity or sub-identity that an individual holds regarding his or her role as a leader.

A leader identity does not necessarily relate only to formal leadership roles, but more importantly how an individual comes to think of oneself as a leader. For this reason, leader identity development is an indispensable component of leader development. It has been noted that leader development can be viewed as enhancing the fit between the requirements of the leader role and the personal identity of the leader (Hall, 2004). Leader development therefore hinges upon leader identity development. Similarly, Shamir and Eilam (2005) suggest that the development of authentic leaders depends upon the centrality of their leader identities to their personal identities. Authentic leaders are thought to be motivated to lead from conviction rather than rewards or
personal gains and their actions are based on positive values and beliefs. In terms of their identity, they think of themselves as leaders and enact leadership at all times, not only when officially in a leadership role (Shamir & Elam). Developing authentic leaders begins with developing strong, salient, and integrated leader identities.

In a similar vein, Komives et al. (2005) proposed a Leader Identity Development model that focuses on the development of college student leaders. They propose various stages of development (see Chapter 5 for a complete review of the various proposed stages) culminating in an internalization/synthesis stage in which students have integrated their self-view as effective in working with others and have confidence that their ability will generalize to any context. They did not need to hold a formal positional role as a leader to know that they were engaging in leadership. Those at the highest stages of leader identity development hold an interdependent view of self (as compared with a dependent or independent self-view adopted in less developed stages). This is similar to Lord and Hall's (2005) model linking leader identity development with skills development such that as leaders develop they take on more inclusive identities, ranging from an individual (novice) to relational (intermediate) to collective (expert) level.

Identities serve a number of important functions implicated in effective leadership and leader development. Baumeister (1995) suggests that one's identity serves as an interpersonal tool and an aid in decision-making. A salient and developed leader identity may facilitate communicating a vision, motivating, directing, and supporting followers. Leaders who know themselves (i.e., are self-aware) and think of themselves as leaders will be more confident and consistent in their actions than others with less self-awareness about their leadership capabilities. Most important for leader development, identity provides a basis for motivation. Social psychological theory suggests that humans have an inner motive to maintain a stable, consistent self-concept (Rosenberg, 1979). As individuals are motivated toward self-consistency, someone with a strong leader identity will be motivated to act in accordance with this identity. As such, it is likely that leaders with developed identities would be likely to seek out experiences to enact leadership. Furthermore, if a leader's possible or ideal self is grounded in becoming an exceptional leader, then such a leader would likely be motivated to behave in ways that promote the achievement of a leader identity (Cross & Markus, 1991). In this way, the leader would be expected to seek out opportunities to develop requisite leadership skills and competencies. Conversely, if someone does not identify as a leader, it seems unlikely that there will be much attempt to acquire the kinds of skills or develop the competencies that are needed for highly effective leadership.

Leadership competencies are developed through experiences that also help to develop and crystallize a leader identity. As identities partly comprise knowledge, experiences, and self-perceptions, building one's knowledge and experiences around leadership will likely strengthen a leader identity. Leader identities are built through the integration of learning and leading experiences with the self. The idea that identities are developed through experience is common to nearly all theories of identity development (Bosma & Kunnen, 2001) and it is expected to be no different when it involves a leader identity. Experience has also been noted as an integral element of leadership development (Day, 2000). Participating in more leadership experiences strengthens the salience and centrality of a leader identity, especially if the outcomes of the experience are viewed in a positive light. Positive leadership experiences are likely to further entrench a leader identity by increasing one's self-efficacy for leadership and motivate a search for additional developmental experiences. But an opposite spiral is also possible. Negative experiences may weaken one's identity as a leader. Leadership experiences even in non-work settings such as volunteer, family, or leisure settings may further the integration of a leader identity with other sub-identities an individual holds.

The process is thought to be a mutually reinforcing one. As leadership competencies develop, the likelihood of a leader identity crystallizing increases, which further supports the motivation to lead and to learn more about leading. Therefore, we propose that leader identities and developmental experiences can be understood as a spiral. A similar set of relationships has been conceptualized in terms of efficacy-performance spirals (Lindsay, Brass, & Thomas, 1995). As articulated by Lindsay et al., the relationship between efficacy and performance is cyclic in that performance influences self-efficacy, which affects performance, and so on. These spirals can be positive or negative in valence and can relate to groups and organizations as well as individuals (i.e., it is an isomorphic multilevel phenomenon). We believe that at a more observable level, such efficacy-performance spirals occur with regard to leadership. The stronger one's self-conception is around being able to lead (self-efficacy for leadership), the better the leadership ability (all things being equal). But at a less observable (i.e., more implicit) level we believe that identity-development spirals also occur in support of the efficacy-performance ones.

Proposition 6: Leadership competence is formed through spirals of leader identity formation and change in the context of learning and development through leadership experience.

The idea that a relationship of leader's identity and development is a mutually reinforcing one is consistent with action theories of lifespan development in which individuals are thought to be both products and producers of their development (Brandstätter & Lerner, 1999). Generally, leaders are both shaped by their development and have an active role in it. Similarly, self-completion theory (Wicklund & Gollwitzer, 1982) suggests that individuals strive to attain a chosen identity by seeking out symbols that are consistent with a desired identity. According to this theory, individuals who choose a leader identity seek out experi-
ences or awards and recognitions consistent with being a leader. When people experience a lack of a relevant identity symbols they tend to feel incomplete. The attainment of these symbols is particularly effective in reducing feelings of incompleteness, especially when others recognize they possess qualities or symbol of a desired identity. Leadership experiences serve to help an individual strive to actualize a chosen leader identity (Gollwitzer & Kirchhoff, 2003).

SKILLS ACQUISITION, COMPETENCY, AND EXPERTISE

The desired outcomes of developmental experiences vary given the current levels of competence and the needs of the individual, among other factors. The goals of developmental experiences may range from enhancing technical skills to building confidence as a leader. As discussed in the previous chapters, we propose that a leader is developed through a continuum of novice to expert. A novice must acquire relevant leadership skills (through gaining relative declarative and procedural knowledge), build strategic and adaptive competencies, and finally develop expertise through years of intentional practice. We will use this skill-competency-expertise continuum as a general framework when discussing the progression of identity-development spirals.

Although this broad framework is used as an illustration, it is not intended to suggest that leader development is necessarily a linear or continuous process. Leader development may be discontinuous, nonlinear, and cyclical. It is best understood as a cyclical process of lifelong learning and development. For example, a so-called master (i.e., expert) leader will still realize new skills that need to be acquired (i.e., high self-awareness). Furthermore, there are no final end states to leader development, thus differentiating it further from stage theories of development. From the perspective of lifelong learning, leader development is considered to be an ongoing process that is never fully complete.

Leader identity–development spirals capture the general trend of development, but numerous factors influence the strength, acceleration, and direction of such spirals. Therefore, a more indepth investigation of the process is necessary. General factors that influence the spiral are introduced and then individually discussed in more detail below, following the broad skills acquisition-competency-expertise framework (see Figure 13.1).

FACTORS INFLUENCING THE OUTCOMES OF LEADERSHIP EXPERIENCES

The quality of experiences and the ability of the leader to learn from experiences and integrate them with the leader identity determine the extent to which any particular experience has developmental potential or impact (also see Chapter 10). Van Velsor and McCauley (2004) suggest that well-designed developmental experiences include three components: assessment, challenge, and support. Development is most effective when all three components are present in an experience. These components each serve important individual functions, but contribute to overall development by providing the resources for learning and helping motivate leaders to focus on learning and growth.

Assessment provides leaders with information about their current strengths and weaknesses. It provides a referent and clarity about what needs attention and cue on how to achieve it (Van Velsor & McCauley, 2004). At the most basic level, assessment serves as a motivator by providing a leader with performance information that may be discrepant from a self-view. Individuals are motivated to close this performance gap by enhancing performance (Brett & Atwater, 2001). Empirical support exists for the developmental enhancements from feedback even longitudinally. As part of an upward feedback program, Managers who met with their direct reports to discuss previous year’s feedback of the manager’s performance showed significant performance improvements over a 5-year period (Walker & Smither, 1999).

One of the most common forms of assessment is feedback, especially multi-source feedback, also known as 360-degree feedback. As of the late 1990s, approximately 90% of major Fortune 1000 organizations had adopted some type of multi-source assessment (Atwater & Waldman, 1998). This system involves providing anonymous feedback to managers based on ratings made by at least one supervisor, peer, or subordinate, and sometimes includes self-ratings (Atwater, Waldman, & Brett, 2002). Multi-source feedback provides an individual with a more complete and accurate picture of their performance as people in different reporting roles to a target may experience different aspects of that person's personality and behavior.
But simply providing feedback does not necessarily translate into enhanced leader development. Meta-analytic evidence suggests that feedback interventions improve performance on average but that over one-third of feedback interventions are associated with decreased performance (Kluger & DeNisi, 1996). Several factors influence the outcomes of feedback on development. First, feedback that directs attention to meta-task processes may attenuate the effects of feedback on performance, whereas a feedback intervention that directs attention to task-motivation or task-learning processes augment feedback intervention effects on performance. Overall, results indicate that feedback becomes less effective as attention is directed up the hierarchy of organized levels of control (task learning, task motivation and meta-tasks), that is, away from the task and closer to the self.

Others have suggested an immediate decline in performance or skill level after receiving discrepant feedback, but a subsequent improvement in skill level over time (Klein & Zeigert, 2004). Furthermore, the specificity of the feedback influences outcomes of learning (Goodman & Wood, 2004). More specific feedback may be beneficial for learning what to do when things are going well, but detrimental to learning rules for responding to poor performance. Providing very specific feedback to a learner may focus their learning experience on correct responses and prevent them from encountering varied circumstances and be less able to handle errors.

**Challenge** refers to how much a particular experience challenges or stretches the individual beyond his or her comfort level. Challenging experiences force individuals to face the limitations of their current skills, abilities, and competencies. Ideally, challenging experiences motivate individuals and push them to acquire new knowledge and skills rather than falling back on habitual ways of responding. Situations that are challenging include those that demand knowledge and skills beyond those the individual currently possesses, are confusing or ambiguous, or are uncomfortable in that the situation is not desired. Difficult goals or conflict also can be sources of challenge (Van Velsor & McCauley, 2004). They also provide the motivation and opportunity to learn. Challenging experiences call for creativity in that they contain opportunities to try a new behavior or reframe existing problems. Additionally, these experiences are motivating because individuals in a challenging situation may desire to attain the rewards associated with reaching difficult goals and/or reduce the discomfort or pain associated with the challenge or failing to live up to the challenge (McCauley et al., 1994).

A developmental experience can be purposely designed to stretch an individual beyond his or her comfort level, but challenge can also be informal or unplanned. McCauley et al. (1994) developed an instrument to measure the extent to which jobs contain developmental components based on the challenge they require. Although challenge provides excellent opportunities and motivation for growth, caution needs to be taken to ensure a situation is not too challenging as to overwhelm an individual’s capabilities. Situations that are overly difficult can lead to feelings of hopelessness, a loss of sense of control, and a focus on emotional coping rather than problem solving. As noted in the findings from years of goal setting research, difficult yet attainable (as compared to impossible or “do your best”) goals lead to the highest performance levels (Locke & Latham, 2002).

Although all leaders need to take some responsibility for finding challenging assignments, individuals who are self-employed may find it particularly difficult. One recent study sought to understand career development of “boundaryless careers” (O’Mahony & Beckhy, 2006). Through conducting interviews with high-tech and film production contractors, the authors found that development and career progression was achieved mainly through stretchwork assignments. These are assignments that contain a new element for an individual, something just outside their domain of expertise or previous experiences. Stretchwork was intentionally sought after and attained by acquiring referrals, reframing their abilities, distinguishing themselves from others, or even offering discounts on new types of assignments.

**Support** shows a leader that others value their developmental efforts. Support helps an individual bear the weight of a challenging situation and can come from other people such as bosses, coworkers, mentors, and family, or from situational factors such as organizational culture or norms or procedures. Leaders need support to maintain a sense of efficacy and openly examine their mistakes (Van Velsor & McCauley, 2004). Further, support may increase learners’ confidence in their ability and relieve some personal stress associated with challenge. Support also facilitates the sense that the leaders have permission to try out new ways of thinking or behaving.

As an example, the support offered through mentoring can be described as either psychosocial or career-related (Kram, 1985). First, psychosocial support is interpersonal in nature and includes friendship and emotional support. This type of support is necessary for the psychological development of a protégé, resulting in for example, strengthened self-efficacy. Career-related support enhances a protégé’s advancement in the organization and may include sponsorship, increasing the visibility of the protégé in the organization, or placement with challenging job assignments. Meta-analytic evidence suggests that the outcomes of mentoring include higher compensation, greater salary growth, and more promotions, career satisfaction, job satisfaction, and satisfaction with mentor (Allen et al., 2004). Further, the benefits of informal mentorship outweigh the benefits of formal mentorship (Ragins & Cotton, 1999).

In addition to that offered by supervisors, mentors, or teammates, support can also be provided through organizational resources in the form of practices, policies, and climate. Organizational climate has been defined as shared perceptions of the events, practices, and procedures
and the kinds of behaviors that are rewarded, supported, and expected in a setting (Schneider, 1990). Climates are often described with respect to a specific strategy or outcome. An organization's climate for leader development or climate for learning may play an important role in support for development (Klein & Ziegert, 2004).

An organizational climate for learning includes the shared perceptions employees hold about the extent to which their organization expects, supports, and rewards the acquisition of knowledge and skills that may enhance job (or leadership) performance. Both researchers and practitioners have given much attention to related concepts such as learning organizations, continuous learning, and knowledge management. Climate for learning might include providing employees with novel work challenges, permission to experiment, feedback, training programs, or formal or informal technologies that support the sharing of knowledge within an organization.

A climate for leader development is more specific than a climate for learning and has received less research attention. This type of climate refers to shared perceptions regarding the extent to which leader development is rewarded, supported, and expected in a particular organization based on the practices, policies, accounts, and events regarding leader development. Organizations that have strong and positive leader development climates provide leaders with more opportunities for development such as feedback, coaching, mentoring, training, stretch assignments, or action learning programs, will tend to reward leaders for developing and refining their leadership knowledge and skills, and provide motivation for leaders to enact newly acquired knowledge and skills on the job.

The importance of a supportive and safe environment has also been noted regarding team learning. One important construct found to play a role in team learning is psychological safety, which refers to shared perceptions team members hold that their team environment is a safe place in which one can take interpersonal risks (Edmondson, 1999). In a team with high psychological safety, members may feel confident to express themselves without fear of embarrassment, rejection, or punishment. Psychological safety describes an environment that is conducive for risk taking in the process of learning (Edmondson, 1999) or adapting to change such as innovations (Baer & Frese, 2003).

INDIVIDUAL DIFFERENCES IN SELF-REGULATORY PROCESSES

In addition to assessment, challenge, and support, which are all aspects of the particular developmental experience itself, CCL includes a fourth element necessary for development: the ability of the leader to learn. Learning from experience involves (a) recognizing when new behaviors and ways of thinking about issues are appropriate and called for,

(b) accepting responsibility for development, (c) have self-understanding, (d) intentionally seeking out growth opportunities, (e) being able to reflect on the process of learning, (f) engaging in activities that provide the opportunity to learn or test the new behavior, and (g) working to develop and use a wide variety of learning tactics to acquire a skill (Van Velsor, Moxley, & Bunker, 2004). The inclusion of ability to learn as an important criterion for development highlights the role that individual differences play in the developmental process. Sternberg identifies what he terms to be "practical intelligence" as an important factor associated with learning from experience, and has some evidence of individual variations on this factor. Unfortunately, very little research in the leadership literature has empirically investigated exactly how leaders learn from experience. Many theories of learning highlight the regulatory processes that facilitate individual learning and development (e.g., Zimmerman, 1989). Several individual difference factors may affect the extent to which individuals can and do engage in self-regulation that builds identity and competence (see Fig. 13.1).

Proposition 7: Individual differences between leaders influence the rate and direction of the spirals of identity development and leader development.

The development of a leader requires one to have a long-term, future-oriented perspective. As such, developmental goals are rarely achievable quickly and therefore involve continuous monitoring and adjustment for success. Additionally, the rewards of development can be delayed, requiring a leader to avoid giving in to habitual or natural tendencies that offer immediate gratification. Self-regulatory processes are required to fight such inclinations. The process of monitoring and adjustment of goal progress involves conscious control over thoughts, behavior, or emotions, and is essential for development. Self-regulation, as an executive function of the self, serves to focus, control, and guide behavior and emotions beyond habits and impulses (Baumeister, Muraven, & Tice, 2000). The executive function of the self regulates important volitional capabilities (Baumeister, 1998) and fosters self-directed intentional behavior including response inhibition, strategy generation and implementation, and flexible action (Denckla, 1996).

Self-regulation serves an important function throughout the leader development process as it plays a role in (a) establishing a goal or desired state, (b) engaging in the appropriate behaviors and emotions needed to obtain one’s goal, and (c) monitoring process toward the goal. To meet goals, a delay of gratification is often required. Self-regulation is necessary to monitor cognition, behavior, and emotions to achieve developmental goals. In the training literature, it has been suggested that the self-regulatory system comprises three interrelated components: practice, self-monitoring, and self-evaluation (Kozlowski et al., 2001). Each of the three self-regulatory processes corresponds to three aspects of performance that individuals regulate throughout the
developmental process: practice (behavior), self-monitoring (cognition), and self-evaluation (affect). Behavioral self-regulation is most clearly linked with development, as one must engage in desired behaviors or practice in order to develop. Emotional regulation helps direct attention away from the self and toward the task or problems (Kanfer & Ackermann, 1989). Negative emotions especially draw attention toward the self, depleting attentional resources that could be devoted to the task. Cognitive self-regulation involves planning and monitoring thought. A recent study (Keith & Frese, 2005) has highlighted the importance of affective and cognitive self-regulation in the training process. They found that emotional self-regulation (emotion control) and cognitive self-regulation (meta-cognition) fully mediated the adaptive transfer performance benefits of error management training over error avoidance training programs. This evidence suggests that engaging in emotional and cognitive self-regulation facilitated transfer effects. Error management training is one way to stimulate these types of self-regulation.

Furthermore, the focus of self-regulation can influence the development of leader identity and a leader's motivation to lead. Kark and Van Dijk (2007) created a comprehensive conceptual framework integrating self-regulatory focus, leader values, possible selves, and leader style. The authors applied regulatory focus theory (Higgins, 1997) as an explanatory mechanism for the influence leaders have on their followers' self-concept. In short, regulatory focus theory suggests that individuals vary in the extent to which they approach pleasure and avoid pain. Although situations influence the intensity of an individual's regulation focus, generally people have a chronic regulatory focus. Those with a strong promotion focus regulate the achievement of awards, have a high motivation for change, seek pleasure, and often focus on achieving an "ideal self," whereas those with a strong prevention focus regulate the avoidance of punishments, have a primary motivation for stability, avoid pain, and focus on the "ought self." As such, the development of a leader identity for an individual with a strong promotion focus is likely through an ideal possible self.

Kark and Van Dijk (2007) propose that leaders' chronic regulatory focus and their value for change influence their motivation to lead. Specifically, those with a strong, chronic promotion focus are likely to have a strong affective motivation, to lead. Because a promotion focus is tied to personal motivation those leaders seek growth because they want to and should be motivated to lead because of affective reasons rather than obligations or external drives. Further, leaders with this desire for change and growth are likely to want to motivate their followers to grow and are more likely to use charismatic or transformational leader behaviors. Displays of these types of behaviors are in turn, likely to prime a promotion regulatory focus in their followers. In sum, it is important to consider whether a leader focuses on regulation of achieving the positive or regulating avoiding the negative.

Effective leaders must regulate their thoughts, behaviors, and emotions to facilitate followers' perceptions of consistency and rationality in order to gain influence (Lord & Maher, 1991). Similarly, regulation is necessary within the development process to persist and be intentional in development. The remainder of this section reviews five particular aspects of self-regulation that are thought to have important implications for leader development in terms of accelerating leader identity-development spirals. Those aspects are: (1) self-regulatory strength, (2) goal orientation, (3) generalized self-efficacy, (4) self-awareness, and (5) implementation intentions (see Figure 13.1).

Self-Regulatory Strength

Recent studies have suggested that the ability to self-regulate is similar to muscular strength. The ability appears to be stronger in some individuals than others, tires after being exercised, and can be built up with practice. Drawing on this analogy, the self-regulatory strength model suggests that self-regulation is an internal resource needed to inhibit, override, or alter responses (Baumeister, Heatherton, & Tice, 1994). Regulatory activities require energy expenditure that can be depleted with use. Individuals are limited in their self-regulatory capacity, but this capacity can be gradually increased over time with practice, similar to how a muscle can be strengthened with exercise.

Baumeister et al. (1994) found that behavioral, emotional, and cognitive regulation all stem from a common regulatory resource such that depletion of self-regulatory resources in one domain can impair self-regulation attempts even in seemingly unrelated domains. For example, exerting restraint by not eating chocolate can deplete resources and subsequently impair persistence in a cognitively demanding task. The self-regulatory strength model has received support in numerous areas such as diet, physical endurance, persistence on difficult tasks, performance on cognitive tests, emotional regulation, and decision-making, among others (for a review see Schmeichel & Baumeister, 2004). Evidence also exists regarding the ability to build the self-regulatory strength through repeated practice (Muraven, Baumeister, & Tice, 1999).

Development requires expending energy regardless of where an individual is in the development process. Similarly, as self-regulation applies to processes involving exerting cognitive, behavioral and emotional effort, it is an important variable throughout the leader development process. Individuals who are better able to regulate their responses may be better suited for development (i.e., have better developmental readiness). DeWaele, Morval, and Sheitoyan (1993) suggest that individuals good at self-management (i.e., self-regulation) are aware of how changes in their life affect their development, are interested in self-development, realize the negative effect of self-regulation failure, are proactive in their self-development, and are responsive to feedback. Broadly speaking, regulation is necessary within
the development process in order to persist and be intentional in development. Self-regulatory processes help a leader focus attention and maintain persistence. The greater self-regulatory strength, the better an individual is able to maintain the energy required to persist at a task and sustain attentional focus (Baumeister, Heatherton, & Tice, 1994). As challenge is a widely recognized component of developmental experiences (McCauley & Van Velsor, 2004), self-regulation is needed to persist through the challenge rather than giving up. Furthermore, strong self-regulation may be particularly important when external resources are lacking. Rather than an individual relying on external goals, feedback, guidance, and support, a leader is able to draw from his or her personal resources to make progress on developmental goals (London, 2002).

**Proposition 7a:** Self-regulatory strength accelerates the ongoing learning and development of leaders.

### Goal Orientation

Core conceptualizations of individual abilities play a large role in channeling self-regulatory processes that guide attention and behavior. For example, if an individual believes that ability is generally unchangeable, he or she has little motivation to invest time and effort in his or her own development. One’s goal orientation is based on these core assumptions individuals hold regarding the malleability or rigidity of abilities. An individual with a learning goal orientation views ability as malleable and developable or an acquirable skill (also called an incremental theorist), whereas one with a performance goal orientation views ability as a more or less fixed capacity (also called an entity theorist; Dweck, 1996).

Goal orientation reflects the internal motivational processes that affect an individual’s task choice, self-set goals, and effort mechanisms in learning and performance contexts. Individuals with learning goal orientations are motivated toward developing competence through acquiring and mastering new skills, seek challenges to perfect competencies, and regard errors as instructive in the process. Conversely, individuals with performance goal orientations are focused on demonstrating competence in safe environments, they prefer tasks that minimize errors, and view high effort as indicative of low ability. Performance goal orientation is further delineated into prove and avoid dimensions. A prove goal orientation focuses on demonstrating one’s competence to gain a favorable judgment from others, whereas an avoid orientation focuses on avoiding an unfavorable judgment from others (VandeWalle, 1997). Additionally, goal orientation may be situation specific. An individual may have a learning goal orientation regarding leadership but hold a performance orientation in a sports context (Yeo & Neal, 2004).

Considerable attention has been given to how goal orientation relates to training and learning (Brett & VandeWalle, 1999) and thus is applicable throughout the leader development process. A significant body of the goal orientation literature suggests that this construct explains an individual’s underlying motivation and approach to learning. As such, learning goal orientation is conceptually linked to motivation to learn. Motivation to learn has been found to significantly predict involvement in developmental activities. Learning motivation predicted involvement in five types of developmental activity (required training on work time, work-based developmental activities on work time, voluntary job-related learning on personal time, voluntary non-job related learning on personal time, and career planning activities) of manufacturing employees (Birdi, Allan, & Warr, 1997). Furthermore, motivation to learn significantly predicted involvement in developmental activities in a longitudinal study (Maurer, Weiss, & Barbeite, 2003).

The effect of learning goal orientation on learning outcomes can be partially explained through regulatory processes. Research has shown that meta-cognitive activity partially mediates the relationship between goal orientation and learning outcomes (declarative knowledge and self-efficacy) in a computer-based training program (Schmidt & Ford, 2003). Meta-cognitive activity—or thinking about thinking—is a type of cognitive regulatory activity that involves monitoring and controlling one’s thought processes. Meta-cognitive monitoring and control behaviors involve such activities as identifying the task and steps to complete the task at hand, evaluating progress, predicting outcomes of progress, deciding where to allocate resources, and prioritizing activities (Schmidt & Ford, 2003). Additionally, meta-cognitive activities explained variance in learning outcomes above and beyond time on task alone. This suggests that individuals who engage in this type of self-regulatory behavior are “learning smarter” by spending their time more efficiently.

In general, goal orientation plays a role in self-regulatory processes in numerous ways. At the most basic level, goal orientation acts as a motivation that helps direct self-regulation in the accomplishment of developmental goals. First, goal orientation is related to both the level and type of goals individuals set. People with learning goal orientations set much higher developmental goals with the goal of mastery, whereas individuals with a performance goal orientation set less challenging goals focused on demonstrating competence (Brett & VandeWalle, 1999). Second, goal orientation is related to the engagement in appropriate behaviors to attain goals. For example, individuals with learning goal orientations are more likely to direct attention to the task rather than the self (Steele-Johnson, Beauregard, Hoover, & Schmidt, 2000). Conversely, people with high performance goal orientations tend to engage in more impression management behaviors. The effort required to monitor self-presentations depletes later self-regulatory resources (Vohs, Baumeister, & Ciarocco, 2005), which are essential for development. Finally, a learning goal orientation may facilitate an individual’s ability to monitor progress toward goal achievement. For
example, those with learning goal orientations have been found to be more proactive in seeking feedback, which is one way to monitor progress toward the achievement of developmental goals (VandeWalle, 2003). In sum, individuals with learning goal orientations are more likely to engage in self-regulatory behaviors promoting the achievement of their developmental goals.

Proposition 7b: Learning goal orientations facilitate development of leader expertise through the use of self-regulation strategies.

**Generalized Self-Efficacy**

Self-efficacy refers to a "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Simply put, it refers to how well an individual believes he or she can do a task. One's self-efficacy judgment is generally determined through past performance or through the observation of others' performance (Bandura, 1997). Self-efficacy beliefs can be developed and strengthened through mastery experiences, modeling, social persuasion, and judgments about physiological states such as emotional arousal and tension as signs of vulnerability (Wood & Bandura, 1989). Meta-analytic evidence suggests a strong positive relationship between self-efficacy and job performance (Stajkovic & Luthans, 1998), which is most often explained through its effect on motivation and regulation.

Self-efficacy is addressed in several theories of motivation including goal setting (Locke & Latham, 2002), expectancy theory (Vroom, 1964), and motivation to learn (Colquitt, LePine, & Noe, 2000). Specifically, self-efficacy speaks to an individual's confidence in the ability to organize resources for goal attainment, and relates to task choice, task effort, and persistence in task achievement (Gist & Mitchell, 1992). In social cognitive theory (Bandura, 1986), self-efficacy plays a key role in self-regulation particularly through its role in goal setting and task persistence in goal achievement. The relationship between self-efficacy and performance has been described as a spiral. Enhancing performance is related to increases in self-efficacy, which in turn is related to increasing performance, and so on. The spiral can be positive or negative (Lindsley et al., 1995). Self-efficacy is a key component in forming attitudes toward development, which explains later participation in developmental activities (Maurer et al., 2003).

Self-efficacy beliefs are often domain-specific, but research has also addressed efficacy beliefs more generally. Generalized self-efficacy refers to a global trait-like characteristic of one's estimate of his or her overall ability to achieve required performance in a variety of situations (Bandura, 1997). Generalized self-efficacy has been included in higher-order constructs addressing one's overall assessment of the self such as core self-evaluations (Judge, Erez, Bono, & Thorensen, 2002) and positive self-concept (Judge, Thorensen, Pucik, & Welbourne, 1999). Generalized self-efficacy was found to be a strong predictor of motivation through the self-regulatory functions of goal-setting and goal commitment (Erez & Judge, 2001). Further, generalized self-efficacy was positively related to a manager's ability to deal with change (Judge et al., 1999). Generalized self-efficacy is particularly useful in predicting how individuals approach novel or complex situations. For example, high generalized self-efficacy was found by Judge et al. to be a precursor for positive attitudes toward critical career-oriented events, specifically those involving major job and organizational changes. Individuals with low self-efficacy may avoid or become defensive in situations in which they believe they cannot perform well, whereas individuals with a high generalized self-efficacy respond more adaptively.

Self-efficacy may be important to maintain self-regulation as it provides motivation for self-regulation. People who have a positive view of their ability to attain desired outcomes are better able to maintain regulation and motivation even when the situation is challenging (London, 2002). On the other hand, people who have low self-efficacy may give up much more easily because they are more threatened by challenge. They are also more likely to engage in self-protective behaviors such as discounting negative feedback or blaming others for their failures. Furthermore, individuals with greater efficacy are more likely to attain their goals because of the nature of the goals they set. Individuals with a positive core self-evaluation (one dimension being generalized self-efficacy) set more self-concordant goals. In other words, individuals with a more positive view of their self and abilities set goals that were more consistent with their values, ideals, and interests than individuals with less positive views of themselves (Judge, Bono, Erez, & Locke, 2005). As self-concordant goals are more self-relevant, the probability for goal attainment is higher because it motivates the individual to put effort toward these goals (Sheldon & Elliot, 1999). This suggests that the developmental goals that individuals with greater generalized self-efficacy are more likely to be consistent with their values and interests, and therefore more likely to be achieved. In sum, increased self-efficacy should facilitate development because it increases the motivation an individual has in facing challenging situations, setting goals, and maintaining self-regulation.

Proposition 7c: A leader's generalized self-efficacy will positively relate to leader development and learning.

**Self-Awareness**

Individuals also differ with respect to the quality and accuracy of self-beliefs as well as differing in their beliefs regarding their ability. One's self-awareness may have important implications for expert leader development, particularly through its link with identity. Self-awareness
may mean different things in different contexts, but usually refers to self-focused attention. One general theme in the self-awareness literature across multiple disciplines is a focus on consistency between aspects of self as well as consistency between self and actions (Carver, 2003). Highly self-aware individuals have a more integrated and internalized view of themselves and behave in ways that are consistent with this self-view. Similarly, in the leadership literature, Hall suggests “self-awareness refers to the extent to which people are conscious of various aspects of their identities and the extent to which their self-perceptions are internally integrated and congruent with the way others perceive them” (2004, p. 154). This definition draws attention to both the quality and accuracy of one’s self-perceptions.

Self-awareness has also been conceptualized and measured similarly to private and public self-consciousness, which is often manipulated by placing a mirror in front of the participant to draw attention to the self. In this sense, self-awareness is conceptualized as a state that can be easily manipulated rather than as a more stable individual difference variable. Although these two conceptualizations are somewhat related, we do need to avoid potential confusion about our use of the term. We refer to self-awareness as an individual difference that has to do with one’s conscious awareness of components of the self and the accuracy of those observations. Other researchers have used similar terms such as self-understanding or self-insight (London, 2002).

Self-awareness is critical for leader development and success. Research has empirically linked self-awareness and managerial performance across a variety of organizational contexts (Church, 1997). To lead effectively, leaders need to have insight into how others respond to their words and actions. Because self-aware leaders are better able to consider the impact of their behaviors on others, they are better able to monitor and adjust their behaviors to meet the needs of others. This should facilitate the adaptive transfer of skills and knowledge they acquire to working with others of various abilities and attitudes as well as to changing environmental situations.

In this sense, leader development can be viewed as the process of enhancing the fit between the expectations and requirements of the leader and the leader’s personal identity (Hall, 2004). Self-awareness is the link that helps a leader to recognize a need to change aspects of his or her identity or to change aspects of the environment to become a better leader. Through being highly self-aware, a leader is able to reflect on his or her strengths and weaknesses and thereby facilitate growth and continuous learning (Hall, 2004). Individuals with greater awareness of their strengths and weaknesses are better able to manage feedback, which is an integral component in lifelong development (London, 2002). Additionally, they are more accepting of feedback from the environment, less likely to discount negative feedback, and better able to integrate feedback with their self.

Self-awareness is an important individual difference factor in understanding self-regulatory processes. VanVelsor et al. (2004) suggest that cognitive self-regulation (metacognition) is a critical element of self-awareness as it sets the stage for asking oneself deeper cognitive questions for reflection. Monitoring and reflecting on one’s thinking and learning processes can enhance self-awareness and the ability of an individual to learn and develop. Self-awareness is likely related to goal setting as well as monitoring the progress toward goal achievement. Individuals with greater self-awareness may set more realistic goals as well as goals most pertinent to their needs. As self-awareness includes self-focused attention, then with greater self-awareness, leaders must pay close attention to progress toward their personal development goals. Leaders with the ability to assess their strengths and weaknesses are also more likely to be aware of their progress.

Proposition 7d: Self-awareness will facilitate the development of leader learning and expertise.

Implementation Intentions

Often people have intentions to perform various behaviors but fail to execute them for a number of reasons. Many people have difficulty beginning tasks or, after getting started, are easily distracted and lose focus on a task. One type of self-regulation strategy called implementation intentions can facilitate goal achievement through a number of psychological processes. Implementation intentions (Gollwitzer, 1999) serve to make the initiation of goal-directed behavior nearly automatic by designating where, when, and how behavior leads to goal attainment. In this sense, implementation intentions take goal intentions a step further.

A goal intention denotes an intention to reach a certain outcome or behavior, whereas an implementation intention denotes an intention to perform a particular goal-directed behavior when a specific situation is encountered. For example, a goal intention might be to improve interpersonal skills, whereas an implementation intention might be “when I meet with my direct reports, I will rephrase their statements before I express my opinion to ensure that I am listening and I understand their concerns.” Generally, implementation intentions “facilitate attending to, detecting, and recalling viable opportunities to act toward goal attainment and, in addition, automate action initiation in the presence of such opportunities” (Gollwitzer, Fujita, & Oettingen, 2004, p. 214). In essence, implementation intentions pass the control of behavior from an internal, cognitive control to anticipated situational cues. Gollwitzer (1999) argued that as soon as the chosen situational cue is encountered, specified behavior is enacted automatically.
Individuals differ with respect to how often they furnish goals with implementation intentions and how strong such intentions might be. Gollwitzer (1999) suggests people generally form implementation intentions around their goals about two thirds of the time without being directed to do so. Meta-analytic results indicate that individuals who employ implementation intentions are better able to achieve goals than those who do not use this strategy (d = .65; Gollwitzer & Sheeran, 2006). The effectiveness of using implementation intentions has been demonstrated for goals as diverse as engaging in health-promotion behaviors to completing written reports to executive control in patients with schizophrenia (Gollwitzer, Fujita, & Oettingen, 2004). Meta-analytic evidence suggests that the use of implementation intentions has a substantial overall positive effect on goal progress (Koestner, Lekes, Powers, & Chicoine, 2002).

The effects of implementation intentions on goal attainment are impressive, particularly when action initiation is difficult, for goals that are easy to forget, or for individuals who have problems with behavioral control or are often preoccupied with cognitive distractions (Gollwitzer, 1999). Furthermore, using implementation intentions has a stronger effect on goal progress when goals are difficult rather than easy (Gollwitzer & Brandstatter, 1997), when the intention to engage in behaviors is strong, when the superordinate goal is activated, and when the link between the situation and desired behavior is clear (Gollwitzer, Fujita, & Oettingen, 2004).

It is likely that individuals who employ implementation intentions have an advantage in pursuing developmental goals compared with those who do not. Specifically, the use of implementation intentions is likely to facilitate developmental goal progress. This effect is particularly pronounced when paired with goals that reflected the interests and values of the individual, such as identity goals. Koestner et al. (2002) found that implementation intentions moderated the impact of self-concordant goals on goal progress, such that relationship between self-concordant goals and goal progress was stronger for individuals who used implementation intentions. One likely reason for this is that individuals often end up pursuing multiple goals at the same time, which presents distractions and obstacles that force them to consciously make commitments and adjustments to a particular goal. Implementation intentions may relieve such a burden by making the most important goals especially salient. This idea is consistent with theorizing on why people are resistant to change. Kegan and Lahey (2001) suggest that individuals are often pulled by conflicting commitments that they must work through before committing to a particular course of action. Forming implementation intentions may facilitate the salience of immediate goals.

Individuals who form implementation intentions regarding their development also may be better able to preserve their self-regulatory resources. Forming implementation intentions creates a mental representation of an anticipated event, much like a schema or a mnemonic aid, which becomes highly activated and accessible when the situation is encountered. The demand on attention is reduced because the mental representation is easily accessible. Additionally, the behavioral response becomes automatic, thereby reducing behavioral as well as cognitive regulatory demands. Empirical support exists for the effect that forming implementation intentions has on reducing the negative effects of ego-depletion, or the depletion of self-regulatory resources (Webb & Sheeran, 2003).

Proposition 7e: Forming implementation intentions regarding initiating leadership practice and persisting through distractions will facilitate leader development.

INDIVIDUAL AND ENVIRONMENT INTERACTION: ACCELERATING LEADER DEVELOPMENT

Environmental factors of assessment, challenge, and support as well as personal factors relating to regulation all contribute to the outcomes of developmental experiences. Although personal and environmental factors may have direct effects on development outcomes, it is more likely that they have interactional effects. Psychologists have long suggested interactions between persons and the environment. It is likely that greater regulatory processes on the part of the individual may compensate for experiences that may be less developmental by nature.

There are any number of potential interactions between assessment, challenge, support, and the various individual differences related to self-regulation. We have highlighted a selection of possible interactions. First, individuals with a learning goal orientation are more likely to be proactive in seeking feedback than individuals with a performance goal orientation. A learning goal orientation has been found to relate to increased perceived value and decreased perceived costs of seeking feedback especially when the individual's leader is low on consideration (VandeWalle, Ganesan, Challagalla, & Brown, 2000). Additionally, individuals with learning goal orientations may be more likely to accept feedback given to them. Individuals may react defensively to feedback that is critical or discrepant with their self-view. Brett and Atwater (2001) found that over time, individuals with a learning goal orientation reacted more positively to discrepant 360-degree feedback than those with a performance goal orientation.

In sum, we have discussed how environmental factors (assessment, challenge, and support) and individual factors (self-regulatory strength, goal orientation, self-efficacy, self-awareness, and implementation intentions) each contribute to the leader development process. We suggest that factors of the person and the environment interact to accelerate development (see Figure 13.2). It is clear that self-regulatory processes are important, but self-regulatory factors may manifest themselves
processes. This shift represents a movement from controlled to automatic processes. As there is a freeing up of resources as a task is learned and becomes more easily performed, motivational factors and self-regulation may be more important during later stages. In early stages, individuals have few attentional resources to spare for self-regulation. As such, self-efficacy judgments are more predictive of early skills acquisition success, whereas self-regulatory mechanisms such as goal setting and self-monitoring are more predictive during later stages (Mitchell et al., 1994). Goal setting is more effective when the task is not completely novel.

Goal orientation is an important variable to consider as it influences the direction of resources invested in the skills acquisition process. In general, individuals with high learning goal orientations should be better equipped for skills acquisition as they may not view mistakes as threats and will be less likely to withdraw from obstacles, minimize effort, or focus attention on performance indicators rather than the task. A study conducted by Yeo and Neal (2004) found that rate of change in effort-performance relationships was strongest for individuals with a low performance goal orientation. These results suggest that over time the effort put forth by individuals with low performance goal orientations was more strongly and positively tied to performance than those with a high performance goal orientation. The authors suggest that individuals with low performance goal orientations may direct their efforts more toward ego management than on the task. In other words, they spend more effort trying to appear as though they are competent rather than investing energy on the task directly.

Research examining the roots of ego depletion has demonstrated that self-regulation efforts targeted at portraying a positive impression to others can reduce the resources available to self-regulate other facets of behavior (Vohs, Baumeister, & Ciarocco, 2005). This may predict the quality of the effort put forth, such that low performance goal oriented individuals work through difficulties early on and are more intentional in their development. At the end of the practice session an interaction was noted between learning and performance goal orientations. The benefits of a low performance goal orientation only emerged for those individuals with a high learning goal orientation. A high performance goal orientation may be particularly detrimental when individuals are trying to learn, as they are not willing to be vulnerable to appearing incompetent.

Goal orientation also may influence the skills acquisition process, particularly as it interacts with the complexity or demands of the task (Steele-Johnson, Beauregard, Hoover, & Schmidt, 2000). Following Kanfer and Ackerman’s (1989) model of skills acquisition, Steele-Johnson and colleagues (2000) suggest that one's goal orientation may be more or less beneficial depending on the demands of the task. For example, performance goal orientation may be beneficial for routine tasks with low cognitive demand because it may cue rehearsal task strategies that accelerate automatization and in turn may free up cognitive resources.
Conversely, learning goal orientation cues individuals to develop task strategies and schemas that may help in the long term. Someone with a learning goal orientation is more likely to direct attention toward the task, which may be more beneficial in early stages of complex skill acquisition as it cues self-regulatory behaviors. The authors suggest that schema development may not be important for simple tasks, or alternatively, benefits of schema development may be time-lagged.

Even before one engages in the skills acquisition process, a choice is made for the need to learn a new skill. Heightened self-awareness may help an individual identify areas that need to be developed. Having an accurate understanding of one’s strengths and weaknesses helps an individual know his or her needs. Highly self-aware leaders may be best able to identify new skills to be acquired, whereas individuals with low self-awareness may discount or ignore self-relevant feedback and have negative attitudes toward work (Ashford, 1989).

People who are better able to use implementation intention strategies are likely to acquire skills faster than those who do not. Implementation intentions have been consistently found to help initiate task-relevant behavior. An individual might have a goal to acquire new knowledge or skills at the declarative or procedural level, yet may be having a difficult time beginning such a process. Forming an implementation intention around learning a particular skill is likely to help an individual begin or persist in skills acquisition. Additionally, one main tenet of implementation intentions that appears to relate to skill acquisition pertains to the automaticity of behavior. Forming implementation intentions makes a behavioral response automatic when a situation is encountered (Gollwitzer, 1999). In this regard, implementation intentions may also speed up the process of attaining automaticity in a particular skill or task, thereby freeing cognitive resources.

**Competency Development**

As declarative and procedural knowledge become more complex and integrated, schemas or mental models are developed. Schemas are generally considered to be organized knowledge about a given concept, including attributes of a concept and the relationships among them. Schemas provide information on the storage of knowledge and a system to integrate new knowledge within a particular domain. Strategic and adaptive competencies are supported through the development of such cognitive representations. As mentioned earlier, strategic competencies involve having an understanding of contingencies that call for changes in attention and behavior in a situation (Bell & Kozlowski, 2002). Strategic competencies are created out of extensive and integrated schemas. Leaders with more developed strategic competencies are better able to respond to a variety of circumstances because they have a larger repertoire of possible responses and a better understanding of when a particular response is warranted. Adaptive competencies are more complex than strategic competencies and involve generalizing knowledge and skills to new situations and situational awareness. A leader with greater adaptability is better prepared to manage unexpected or complex situations (Kozlowski et al., 2001).

In addition to its role in acquiring knowledge and skills, regulation is also a key component in the development of competencies, but the role may manifest itself slightly differently at this level. Because competencies are developed out of cognitive representations of events such as schemas and mental models, exploring the role of regulation in the development of these representations is a valuable first step. A more developed schema is one that contains more elements, more links among elements, and a more complex hierarchy of elements. Although more information is contained in an expert's schema relative to that of a novice, these component “chunks” are also larger and are more united. Because there are more links and stronger links among pieces of information, experts are more quickly able to find information contained in their schema than a novice (Fiske & Dyer, 1985).

According to the cognitive developmental approach, adaptation involves development through new forms of thinking that include greater use of reflection and integration of contextual, relativistic, and subjective knowledge. The term cognitive complexity has been used to describe individual differences in cognitive capacity. Cognitive complexity has been found to explain the effect of age and educational factors on the integration of cognitive and affective information and experience (Labovitch-Vief & Diehl, 2000). Cognitive-affective integration describes the extent to which individuals are able to integrate thinking and feeling. Greater integration is related to more proactive and healthy coping strategies that involve choice, purpose, and realism rather than defensive, hostile, or escapist types of defense strategies.

The importance of having a complex and integrated behavioral repertoire and understanding of when certain thoughts and behaviors are warranted is of utmost importance in leadership. Regulation of the self in terms of maintaining a balance between what is expected of the leader and one's behaviors has been investigated in the leadership literature. Specifically, adaptive self-regulation refers to a “social process in which leaders attempt to understand and adapt to the role and performance expectations of organizational constituents” (Sosik, Potosky, & Jung, 2002, p. 212). Adaptive self-regulation involves the detection of discrepancies between leaders' current behaviors and the standards various constituents hold and resolving these discrepancies by managing others' expectations through regulation techniques of standard setting, enacting different behavior, and self-monitoring (Tsui & Ashford, 1994). Developmental feedback may help leaders to display a wider variety of behaviors and cue the use of strategic competencies that leaders develop.

Forming implementations intentions might accelerate the development of strategic competencies that would normally be built over
longer periods of time through encountering many different situations. One potential caveat is that there seems to be an implicit assumption that an intended behavior is something that the individual has some baseline ability to perform. Most studies have proposed implementation intentions as a solution to the failure to initiate task-directed behavior or persistence in a desired behavioral goal, rather than a component in the learning process. Theoretically, building an implementation intention might facilitate the development of a mental model of contingent behaviors as a tool to build competence. As implementation intentions have been described as a strong mental link between a goal and action (Gollwitzer, 1999), it seems feasible that a number of implementation intentions might facilitate the creation of a mental representation of competence in a particular domain. Through repeated enacting of intentions, desired behavior becomes automatic and becomes part of a strategic competency. In other words, an individual automatically behaves according to his/her schema of contingency-based responses.

In addition to influencing the skills acquisition process, goal orientation affects how existing knowledge/skills are used as well as the transfer of new skills. Individuals with learning goal orientations focus on ways to master tasks so as to develop their competence, acquire new skills, and learn from experience (Brett & VandeWalle, 1999; VandeWalle, Brown, Cron, & Slocum, 1999). As individuals with learning goal orientations focus on mastery and learning from experience, they will likely build strategic understandings of the contingencies and be better able to generalize competencies to novel situations.

A similar line of reasoning offers suggestions of the role self-efficacy plays in adaptive competency development. Adaptive competencies are built as individuals become better able to extrapolate competencies to new situation or transfer training to new circumstances. Meta-analytic findings suggest that post-training self-efficacy predicts the transfer of training (Colquitt et al., 2000). Further, self-efficacy may relate to an individual's adaptive competency through its role in dealing with change, uncertainty, and challenge. Individuals with high self-efficacy are more likely to exert extra effort to respond to a challenge (Wood & Bandura, 1989). The authors propose that personal efficacy suggests a resilient self-belief in one's capabilities to exercise control over events to accomplish a desired goal.

Similarly, Judge, Thoresen, Pucik, and Welbourne (1999) found that generalized self-efficacy, as part of a positive self-concept, was positively related to a manager's ability to deal with change. The authors suggest that in situations of change, novel and complex situations arise. As discussed above, self-efficacy is very useful in predicting how an individual responds to new situations. In particular, high self-efficacy may be an antecedent of positive attitudes toward critical career-oriented events, such as those involving major job and organizational changes.

Individuals with low self-efficacy may avoid or become defensive in situations in which they believe they cannot perform well.

**Expertise**

The importance of regulation in developing expertise in a particular domain is crucial. Regulation may serve three important functions: (a) setting increasingly more difficult goals, (b) motivating years of practice, and (c) being intentional throughout a practice session by monitoring progress. Research has shown that the amount of deliberate practice is strongly predictive of the attained level of performance of experts (Ericsson, Krampe, & Tesch-Römer, 1993). Regulation at this level facilitates the persistence of deliberate practice to build expertise. Having a stronger ability to regulate one's thoughts, emotions, and behaviors helps an individual to focus attention on the task even beyond reaching basic skills acquisition. After an acceptable standard of performance is reached, behavior becomes automatic and more difficult to intentionally modify.

Ericsson (2003) refers to this difficulty as the arrested development associated with automaticity: “The principal challenge for attaining expert performance is that further improvements require continuously increased challenges that raise the performance beyond its current level” (p. 110). What distinguishes expertise from acceptable performance is a push beyond an acceptable standard through years of deliberate practice, raising performance standards, and taking on greater developmental challenges. This may be especially relevant to leader development when events conspire to push other agendas instead of learning. Ego depletion or low self-regulatory strength might be associated with falling back on well-learned behaviors rather than attempting more challenging approaches. As noted by one prominent approach to leadership development (McCaulley & Van Velsor, 2004), experiences that are highly developmental in nature contain a large dose of challenge (in addition to assessment and support).

Similar to its role in skills acquisition, goal orientation might relate to expertise development. It has been suggested that one's goal orientation provides a cognitive framework to respond to achievement situations and influence performance through the use of self-regulation techniques (VandeWalle et al. 1999). These regulation techniques play an important role in intentional practice, the key component of developing expertise. Individuals with a learning goal orientation may expend more effort as they believe that expending effort is viewed as a strategy for developing ability and is related to task achievement. Similarly, they set more difficult goals, intend to put forth more effort, and intend to engage in more planning. In addition, it has been proposed that those with a strong learning goal orientation are proactive in seeking feedback (VandeWalle, 2003), which should augment practice in facilitating the development of expert performance.
Implementation intentions can facilitate the initiation and execution of deliberate practice, the main determinant of expertise development. Leaders who regularly form strong implementation intentions may be able to form intentions to enact leadership practice when a situational cue is encountered. For example, a leader might practice “ensuring shared understanding” (Horey et al., 2004) by forming an implementation intention to tune into the content, emotion, and urgency of a message when receiving new information regarding a mission. Additionally, implementation intentions also influence the persistence through task distractions. As expertise is developed through deliberate practice, forming an implementation intention may help to practice a specified task despite distraction. Implementation intentions can also be formed about how to handle distraction aiding in the focusing on the task and avoiding task-irrelevant cues and distractions (Gollwitzer, Fujita, & Oettingen, 2004). Additionally, implementation intentions may also help to reduce the negative effects of ego-depletion, or the exhaustion of self-regulatory resources. Because implementation intentions serve as an automatic response, the drain on self-regulatory resources is reduced (Webb & Sheeran, 2003).

Expert performance is explained through increasingly complex control and self-regulation processes, which are critical for making practice deliberate and intentional and facilitate a push beyond a typical level of performance (Ericsson, 2003). As such, the greater the self-regulatory strength, the better equipped a leader is to deliberately practice furthering expertise development. Additionally, the greater efficacy that a leader has the more likely he or she will continue with practice. Leadership efficacy refers to belief in one’s ability to lead change, set direction, gain commitment, and overcome obstacles to change, which has been found to positively relate to engaging in leadership. This suggests that those with higher leadership efficacy seek out more opportunities to practice leadership (Paglis & Green, 2002). Through these types of “practicing leadership” episodes, greater leadership expertise is developed. Similarly, individuals high in leadership efficacy may be more receptive to feedback, instruction, and challenges at work (Klein & Ziegert, 2004), all of which further leader development.

To attain expert performance, individuals must continually monitor their performance and design intentional practice sessions around their own specifically pertinent issues. Ericsson (2003) suggests that individuals address specific performance problems through problem solving and generating specific modifications that can be fully integrated through extended deliberate practice. Often an individual must recognize areas needing development without substantial guidance from others. Self-awareness may help an individual to perceive a particular area that needs practice as well as monitor progress to that goal within a practice session.

Integration with Leader Identity

Clearly, experiences are necessary for the development of leader skills, competencies, and expertise, but how do these experiences shape a leader identity? Leaders can take away any number of lessons from a given developmental experience. McCall et al. (1988) identified five overarching themes for lessons learned from experience: (1) setting and implementing agendas, (2) handling relationships, (3) basic values, (4) executive temperament, and (5) personal insight. The first two categories refer to basic skills learning such as technical knowledge, prioritization, accepting responsibility, communication, and emotional regulation, whereas the latter three categories are at a deeper level and could foster integration with individual leader identity. Basic values refer to the principles that guide appropriate behavior as outlined in our chapter on moral development (Chapter 6). Executive temperament refers to qualities an individual possess that allow for dealing with uncertainty or change, such as adaptability. Finally, personal insights involve enhanced self-awareness. These types of lessons are integrative with leader identity as they are all relevant to the self and identity development.

No single agreed-upon theory exists outlining the exact process by which individuals use experience to develop their identities. The process likely differs to some extent among individuals and across different types of experiences. Drawing from several developmental theories, a few important themes do emerge. First, the choice to integrate an experience with identity is outlined in Piaget’s work with regard to the processes of accommodation and assimilation. Second, Kegan (1982) offers suggestions on what needs to occur in an experience in order for it to help develop leader identity. Finally, the practice of reflection is highlighted as an effective tool to produce the opportunity and need for changes in identity. In particular, accommodative self-reflection that occurs when goal attainment is disrupted can promote increasing levels of self-understanding (King & Hicks, 2007).

Piaget described identity development in terms of assimilation and accommodation. Individuals who assimilate their experiences do not change or elaborate self-schemas with the experience; rather, they integrate external elements like experience into evolving or completed identity structures (Block, 1982). Identity assimilation is defined as processes whereby individuals change aspects of the situation or discount information to maintain the current self-view. Identity accommodation, on the other hand, describes a process in which individuals incorporate experiences and changes to their existing self-schemas. An ideal state of adaptation involves a dynamic equilibrium between assimilation and accommodation—what Piaget termed equilibration. He defined this not as a balance between competing forces but through processes of active self-regulation (Block, 1982). Some degree of identity stability is desirable (assimilation) as well as a degree of change (accommodation).
Individuals who are able to manage equilibration hold a stable sense of self, but are able to make changes to their identity when experiences call for such changes. From this perspective the notion of accommodative self-reflection is the practice of “thoughtful examination of lost goals and the reconstruction of and reinvestment in new goals, commensurate with what one has lost” (King & Hicks, 2007, p. 627).

According to Kegan (1982), development occurs as an individual encounters increasingly complex experiences and integrates these experiences with the self. This developmental framework focuses on growth in terms of building a more complex and integrated understanding of the leaders’ world and the self in the world. Leaders develop as they move to more complex ways of knowing. Before leaders can move to a more complex knowledge principle, they must first come to realize that they hold such assumptions, principles, and world views. Often these knowledge principles are so embedded in the self that one is not even aware of a holding such a belief. For example, a leader might hold a guiding knowledge principle with respect to leadership. This leader may view leadership solely in terms of a formal leader role with the goal of giving orders. Before this leader can come to a more complex understanding of leadership, he or she must first become aware of this way of thinking about leadership (and its potential limitations) and hold it as ‘object’ by separating the self from this view. Once the leader is able to explicitly see through this view rather than implicitly seeing with the view, he or she is free from it to move to a higher developmental level. In this sense, leaders can develop their leader identity through experiences that encourage them to explicitly examine the assumptions they hold and separate the self from them. Once these assumptions or knowledge principles are identified, separated, or differentiated, new principles are integrated into a broader and more complex perspective of how things are interrelated.

Schön (1983) suggests that reflection fits into two general kinds: reflection-on-action and reflection-in-action. We reflect on action, thinking back on what we have done. After-action reviews are an excellent example of this type of reflection. Most common approaches to study reflection include coached reflection, which refers to a situation in which another individual or group of individuals provide an individual with formal tools to help them work through a situation and learn from it. Coached reflection is often a key component of coaching and mentoring. Action learning refers to a continuous process of learning and reflection. Action learning focuses on an existing job challenge and leads to intentional, development. A key emphasis of action learning is getting things done with support of colleagues (Day, 2000). Reflection in action learning settings has been empirically linked to leader behaviors. Hirst, Mann, Bain, Pirolla-Merlo, and Richver (2004) found that leaders’ learning through reflection in an action learning setting was related to later engagement in facilitative leadership. Facilitative leadership was in turn related to team reflexivity and performance. Facilitative leadership was defined as behavior that promoted the trust, respect, conflict resolution, and open communication among team members.

In contrast to coached reflection, reflection-in-action refers to unstructured reflection that individuals engage in during the course of an experience rather than after the experience (Schön, 1983). In general, this type of reflection involves inquiry and interpretation either within a leader’s mind or through discussion with others. Seibert (1999) notes that the best leaders are intentional and proactive about engaging in ongoing reflection, but environmental factors also contribute to the success of reflection-in-action. These conditions include autonomy, feedback, access, connection and stimulation by others, pressure, and momentary solitude.

The importance of reflection has also been noted at the team level of analysis. Edmondson (1999) investigated the effectiveness of teams that engage in learning behaviors. She observed that team learning was an iterative process of individual learning through experimentation and observing feedback effects. Further, learning is most effective when teammates engaged in reflection and discussion.

**SUMMARY AND IMPLICATIONS OF LEADER IDENTITY PROCESSES**

This chapter has elaborated on the integrative processes of self-regulation and identity in the lifelong leader development journey. These are especially important in the overall developmental process in that they link the deeper aspects of adult development with the most observable, surface-level components of skills acquisition, competency development, and expertise. Central to the developmental process at this mid-level, leaders develop through a cyclical process of developing a leader identity and engaging in developmental experiences. As individuals come to view themselves as leaders, they will likely seek out more experiences to develop requisite leadership skills and competencies, and engage in what we call “practicing leadership.” Participation in these experiences also strengthens a leader identity.

Factors of the environment such as assessment, challenge, and support interact with individual differences in self-regulation denoted by goal orientation, self-efficacy, self-awareness, self-regulatory strength, and implementation intentions to influence the strength of the spiral. We suggest that these variables influence or moderate the process of development. Although each component might have unique contributions to expertise development, one important theme is the role of self-regulatory processes. A few of what we see as the more relevant and promising factors were discussed; however, other individual differences may also influence these developmental spirals. For instance, individual differences in the need for achievement or drive to self-evaluate may play a role in the amount of feedback seeking behaviors individuals partake (Ashford & Cummings, 1983).
Some individuals may also be more inclined than others to engage in developmental activities in general. A few individual difference factors have been developed to address these differences such as personal growth initiative (Hardin, Weigold, Robitschek, & Nixon, 2007) and growth need strength (Hackman & Oldham, 1976). Additionally, individual differences in motivation to lead (Chan & Drasgow, 2001) have implications for the leader development process. Leaders with high affective motivation to lead (i.e., they enjoy acting as a leader) may respond differently from individuals with high social-normative motivation to lead (i.e., they feel an obligation to lead). Finally, it was noted that individuals use processes of accommodation and reflection to integrate personal experiences with their identity. Doing so more intentionally might further accelerate the development of a leader identity and overall leader development.

CHAPTER

14

Adult Development Processes in Leader Development

Thus far, we have discussed leader development in terms of leadership competencies (viz., strategic and adaptive competencies) and how they are acquired over time, as well as the supporting processes associated with identity development and self-regulation. These processes and functions that are thought to be important for effective leader development occur within the deeper context of adult development. As noted in earlier sections of this book (see especially Chapters 1 and 2) every day the Army trains soldiers and grows leaders; however, a more complete portrayal is that the Army is engaged in continuously developing adult leaders.

We believe that this is an approach that could benefit other types of organizations as well. Rather than tackling leader development in an episodic and program-based manner, most organizations could improve their initiatives in this regard by incorporating more of the “big picture.” Specifically, it is important to recognize that leader development occurs in context. One context is that provided by the organization. A second context is embedded in the developmental experiences in the form of assessment, challenge, and support. A third context that will be elaborated on in this chapter is that of adult development. Organizational leaders develop in context of their development as adults. So a pertinent question is what are the unique or driving forces of adult development that might inform and help accelerate leader development?

We know from the adult development literature (see Chapter 3) that there are unique aspects of development in adults as compared with children and adolescents. In particular, adult development is driven much