

# 9

## Beginnings Matter in Genuine Leadership Development

BRUCE J. AVOLIO and GRETCHEN VOGELGESANG LESTER

We take the position in this chapter that most of the strategic efforts to develop leadership probably start too late in the life cycle to optimize the impact on genuine leadership development. We might come to a similar conclusion when later in life someone tries to learn a new language. Why? Current evidence suggests that when an individual's brain is fully wired it is much more difficult to develop a second language, thus schools are taking the lead in introducing languages at much earlier ages (Stewart, 2005). Evidence from a meta-analysis of leadership development interventions shows that although the effect sizes of developmental interventions focused on younger (younger than 22 years old) versus older (over 45 years old) participants do not show significant differences at first glance (younger  $d = .536$ , older  $d = .539$ ), when corrected for attenuation, there was a significant difference with leadership interventions having a stronger impact on younger (corrected  $d = .683$ ) rather than older leaders (corrected  $d = .56$ ). Furthermore, it is

important to note that few leadership development studies have been focused on younger participants, and thus, the sample size for these data is small, yet still informative. Given these findings, we argue that similar to early language development a parallel strategy should be adopted for leadership development, not only in terms of being ahead of brain wiring but also being at the forefront of the development of what cognitive psychologists have called the individual's *actual self*.

To the extent that we formulate what constitutes our actual self from the early stages of life into adulthood, it makes sense to start leadership development before one's earliest actual self is formed. In doing so, we could build more of a promotion focus throughout one's life-span for advancing leadership development.

Earlier leadership development intervention in the life-span would afford greater opportunity to shape what constitutes the 'possible self', especially with respect to the social construction in an individual's mind about his or her efficacy to lead others. This "leader self-view" may be one of many self-views an individual has, which are perceptions of one's attributes and abilities, the current goal manifestations, and the possible selves that will enable the individual to fulfill his or her goals (Lord & Brown, 2004). Because self-views are activated by particular situational cues, it is important to keep the "leader self-view" salient in order to be activated at a specific moment. By instilling the idea of 'leader possible selves' at an earlier age, or ideas of what type of leader the individual can be in the future, the basis for self-development is not only created, but also reinforced (Lord & Brown, 2004).

Leadership is the process by which leaders and followers move towards a specific goal, where individuals in *all* roles are imperative to the successful attainment of a

positive outcome. Thus in addition to the earlier focus on the leader self-view as a possible self, we should also be developing individuals to explore what constitutes exemplary followership as part of the actual self. Situations and specific goals will then determine if the individual will activate the leader or follower actual and possible self, with the expectation that both of these manifestations will motivate further leadership self-development.

### **SOME PRACTICAL CHALLENGES**

On a global level, the birthrates of industrialized and industrializing countries are falling, limiting the workforce and increasing elderly populations ("Changing global demographics", 2003). Many world nations are already seeing productivity decline, as the workforce is too small to continue at the previous generation's pace. In the United States, workforce training organizations estimate that almost half of the current organizational leaders will be retiring within the next decade, leaving behind a void for succession planning for our future organizational leaders (Byham, 1999).

In addition, the smaller sizes of Generation X and the Millennial Generation compared to the near-retirement Baby Boomer Generation expose a general shortage of skilled North American workers, with similar parallels in other Western economies. These demographic changes, coupled with the increased mobility of the workforce and flatter organizational structures, reveal a significant concern – that traditional succession planning techniques within organizations will not be adequate to train and develop a sufficient number of next generation leaders. This is magnified in companies like Boeing that expect that 70% of its senior to middle level leadership will retire in the next five years!

Changing business models have also distorted the hierarchical conceptualization of the firm, creating the need for leaders and leadership at all levels of organizations. These new organizational forms necessitate that authority and decision-making responsibility to take more decisive action occur at the point of contact with challenges regardless of organizational level (Schneider, 2002). The advent of what have been called *radix* (Schneider, 2002) organizations, where the firm's foundation must be flexible to competing and changing demands, also drives the need for more leaders and leadership at the lowest possible levels of organizations.

Ironically enough, John Gardner (1990) in his book "On Leadership" lamented the quality of available leaders that would be needed to sustain the United States over time back in the late 1980s. He even went so far as to estimate the number of leaders that would be needed in 1990 for all sorts of positions from town councils to corporate boards to be somewhere in the range of 2.4 million leaders. The question he raised was where would all of these leaders come from? As we suggested above, that number may have grown as the need for leaders at 'all levels of organizations' has also grown.

Customarily, organizations have trained a specific set of skills or capabilities to their chosen successors, and then waited for leadership to emerge through different positions or responsibilities (Day, 2000). However, with a looming leadership shortage and global war for leadership talent, we cannot rely solely on organizations to train their leaders; we must begin leader development at an earlier age, developing leaders long before they even join those organizations to pursue their careers. We take the position that we must facilitate the next generation of leaders to take responsibility for their own development at earlier stages in their life stream, and for institutions such as family,

elementary, middle, and high schools, and universities to also aid in the honing of leadership potential.

### **LEADERS ARE BORN AND MADE**

John Gardner (1990) answered the common question regarding whether leaders were born or made saying, “Nonsense! Most of what leaders have that enables them to lead is learned.” (p. xix). The question Gardner responded to has pervaded the leadership field since its inception, and even before in terms of philosophical discussions about what constitutes this mysterious activity we call leadership (Avolio, 2005). Indeed, in our view, an either/or answer to this question determines how one would likely go about studying and developing leadership in youth – forcing a choice between either selection *or* development. However, recently published studies on young leaders within sets of twins have settled on the idea that leaders are born *and* made. As such, there is both a genetic and situational influence upon the cognitive, emotional, and behavioral development within an individual over the course of the lifespan (Arvey, Zhang, Avolio, & Krueger, 2007).

Riegel (1975) notes, “human development can only be understood by conceiving the emergence of behavior over time as a result of an ongoing exchange between the organism and the environment” (p. 46). Using Riegel’s work as our guide, then our core questions become: what is the ongoing exchange that produces leadership, and when should that exchange be initiated?

Perhaps then even more important than the genetic influence on leadership is determining when and how the development of leaders is most apt to succeed – if genetics account for approximately 30% of the variance associated with leadership

emergence (Arvey, Rotundo, Johnson, & McGue, 2006), how is the other percentage accounted for by the situation/context and does this vary by age of onset of the interventions to develop leadership? Further, is there an interplay between when the situation may matter more versus when genetics may play a larger role? Also, are there some individual difference constructs that are more or less affected by the situation depending on when the intervention occurs? For example, there are some traits that are more genetically loaded such as intelligence or core self concept (Conley, 1984; Markus & Wurf, 1987; Roberts, Walton, & Viechtbauer, 2006) that may be less affected over time by development. In contrast, more trait-like or state-like constructs like optimism, hope or resiliency, might be impacted at later points in the life-span than more fixed traits.

Research on specific resources or capacities such as hope, resilience, optimism, and efficacy supports their developable nature over time (Bandura, 1997; Carver & Scheier, 2005; Luthans, Avolio, Avey, Norman, & Combs, 2006; Masten & Reed, 2002; Snyder, 2000). Furthermore, although traits such as intelligence or personality are deemed more global and enduring, these state-like resources may be activated in a more situation-specific manner. These resources, as suggested by Hobfoll (2002), are personal characteristics that are valued due to specific goals or events, and their availability can make the difference between success and failure. Evidence also suggests that there are spirals of resource growth or decline, leading us to the conclusion that a continued focus on maintaining and adding resources is imperative to continued positive development (Hobfoll, 2002).

Further complexity is suggested by the multiplicative nature that may be possessed by these resources, i.e., when developed in conjunction with traits or other resources, they could interact in a manner that results in greater amounts than just the summation of the pieces (Hobfoll, 1989; Luthans, Avey, Avolio, & Peterson, 2010; Luthans, Avolio, Avey, & Norman, 2007; Walumbwa, Peterson, Avolio, & Hartnell, in press). At this time, there is little understanding of how all these capabilities can work together to develop a new generation of leaders.

It is clear that to advance our understanding of leadership development, we will need to be more aware of the sequencing of leadership development throughout the individual's life-span. Sorcher and Brant (2002) suggest that the opportunities for leadership development diminish as the individual reaches his or her mid-to-late twenties, and initially dynamic factors such as self-regulatory focus, motivation to lead, learning goal orientation, and leader self-efficacy, which are initially more dynamic state-like capacities or states, become increasingly more fixed. If this is the case, we should be focusing our leadership interventions on younger subjects, reaching them before trait-like and state-like resource capacities become more firmly established in their actual self.

In the remainder of this chapter, we will focus our discussion on what we know about the genetic factors influencing leader emergence or role occupancy. We will then center on the idea of developmental readiness, and how we can create this capacity in younger leaders before their resources become stabilized. After discussing both these dynamic and static components, we will discuss how developmental readiness impacts the leadership development of an individual. Finally, we will discuss interventions

focused on leader skills and behaviors, which can tap into developmental readiness in order to accelerate the creation of a new generation of leaders.

### **EVIDENCE: LEADERS ARE BORN**

#### **Genetic Evidence**

Few studies have explored the genetic basis for leadership (Johnson, Vernon, Harris, & Jang, 2004). Of the published empirical research, the studies used identical and fraternal sets of twins and correlated different genetic traits to the transformational and transactional leadership dimensions (Arvey, Rotundo, Johnson, & McGue, 2006). Some of the genetic factors covaried between the leadership dimensions and specific traits; however, the variance accounted by genetics was 48% for transactional and 59% for transformational, suggesting that although some aspects of leadership are inherent in one's DNA, there is also a wide latitude within which interventions focused on leadership development can have an impact. We also expect that these values are inflated to some extent due to the self-report nature of the methods used in the studies to assess leadership style. Although this research gives us some initial insight into what percentage of leadership may be heritable, it does not inform us as to how we can use this knowledge to develop leaders. The best insight from this evidence is that although specific genetic codes are important, there are other variables that impact leadership development beyond what an individual possesses at birth.

Furthermore, recent research examining the emergence of identical versus fraternal twins into leadership roles over the life-span has begun to produce some evidence of the explicit factors in the context that contribute to leadership role occupancy as opposed to the 30% due to genetics (see Figure 1). Specifically, it has been found that



the nature of work experiences, parental upbringing, training and educational experiences all contribute to the emergence of an individual into leadership roles much later in life. For example, those twins who had more authoritative versus authoritarian parenting emerged more frequently in leadership roles later in their careers. Twins that broke rules but not laws in high school, tended to assume leadership roles later in life. Also, twins that had a great deal of leadership role experience earlier in life, whether good or bad experience, tended to emerge more frequently as leaders. The experiences that shaped leadership development were through a variety of different conduits including parental or sibling support, educational programs, religious influences, or work experience (Arvey, Zhang, Avolio, & Krueger, 2007). Further analysis of a study focusing on only female twins showed that the work experiences were significantly more important than family experiences in accounting for females' entry into leadership roles (Arvey, et al., 2007).

In sum, although there is certainly a genetic factor or load that may be predictive of leadership role occupancy, there are also numerous developmental experiences that an individual may have throughout his or her childhood and teenage years that will also affect leadership emergence. With this in mind, it is imperative that we continue to offer developmental opportunities that can optimize the developmental readiness of each individual (Avolio & Hannah, 2008).

### **The Role of Personality Factors**

In contrast to the emerging research on genetics and leadership, many researchers have published empirical work on core personality dimensions and their relationship to leadership and its emergence (Barrick & Mount, 1991; Judge, Bono, Ilies, & Gerhardt, 2002; Lord, DeVader, & Alliger, 1986). Specifically, a meta-analysis that focused on

personality traits and leadership *emergence* offered the following conclusions: extraversion correlated .31, conscientiousness correlated .28, openness correlated .24, and neuroticism correlated -.24. It is important to note, however, that leadership emergence was operationalized as one's role attainment, and does not necessarily mean the leader was effective within that role. This was also the same way that leadership emergence was defined in the twin studies cited above.

According to McCrae and Costa (1994), personality characteristics have been shown to be fairly stable after one reaches his or her thirtieth year, suggesting that as we reach adulthood, we may be able to determine who will emerge as a leader depending more upon personality traits. However, more recent and contrary evidence suggests that personality traits continue to change and develop up to age 50 (Fraley & Roberts, 2005; Roberts & DelVecchio, 2000), making them trait-like versus static traits. In either event, situations in early adulthood that focus on leadership emergence and development may determine the extent to which individuals develop towards becoming effective leaders. Early interventions may also impact the elasticity we observe in traits and states later on in the life-span.

Although personality has been traditionally attributed to genetic factors (Loehlin & Nichols, 1976), twin studies have shown that only 50% of the variance is accounted for by genetics or heritability (Loehlin, McCrae, Costa, & John, 1998). Therefore, we have chosen to separate out what we know about leadership and genetics from what we know about leadership and personality, due to the large amount of variation (50%) that is driven by situational and contextual factors that an individual may experience during his or her lifespan. Furthermore, the continuous development of personality throughout one's

life span, suggests that we can develop much more than previously thought, especially concerning emerging leaders. This conforms to most behavioral geneticists' views of the genetic structure of individuals, which they suggest has greater plasticity than previously imagined.

Overall, some of our leadership potential appears to be encoded in our DNA or our personality. Yet a substantial amount of variance remains unexplained, leaving open the possibility for leadership interventions that can make a positive difference in the long-term potential of individuals.

### **EVIDENCE: LEADERS ARE MADE**

#### **Developmental Readiness**

Much of the research on leadership development focuses on what leaders can do to have an impact on their followers or their organizations (Avolio & Hannah, 2008; Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Bass & Riggio, 2006; Gardner, Avolio, Luthans, May, & Walumbwa, 2005; House & Podsakoff, 1994). Inherently, then, *leadership* can be defined as a social influence process by which an individual motivates followers to move towards a particular goal or mission. It is important that we also look at how leaders *and* followers develop, because the predicted leadership shortage suggests that we will not have enough current leaders for emerging leaders to model.

When we examine *leader* development, it is the individual person that we are attempting to reach with the developmental training, specifically to create the conditions by which this individual will effectively take on leadership roles throughout his or her lifespan. A key aspect in this model, depicted in Figure 2, is the idea of developmental readiness, which we conceptualize here as the self-regulation, motivation, goal

orientation, and efficacy necessary for emerging adults to approach leadership roles (Hannah, 2006).

### **Self-Regulatory Focus**

Regulatory focus is a theory of self-regulation that drives the movement towards desired end-states (Higgins, 1997). There are two different methods to achieving these ends: approach or avoid. When one approaches a specific end-state, or takes a promotion focus, he or she attempts to advance or develop towards an ideal (Higgins, 1997). In contrast, when one avoids a specific end-state, or takes a prevention focus, he or she is more concerned with protecting the status quo. Individuals who take a promotion focus are more aspirational, and thus may achieve greater accomplishments by the nature of goal-attaining desires; whereas individuals who take a prevention focused strategy may perform their duties and obligations well, but do not strive to attain higher levels of success (Lapidot, Kark, & Shamir, 2007). To develop our young, emerging leaders, we must instill the idea of a promotion focus – encouraging them to take on more leadership roles and to aim high with their future aspirations. Individuals with this sort of promotion focus are more likely to take the risk of trying on leadership roles even if they fail in doing so, which is part of the development process.

Evidence suggests that children learn a specific self-regulatory focus from their parental interactions at an early age (Manian, Papadakis, Strauman, & Essex, 2006). Parents who encourage their children to try difficult tasks and engineer opportunities for success instill a promotion focus; whereas, parents who are overly worried about the safety of their children and instill responsibility in them while criticizing the child for making mistakes, foster a prevention focus (Manian et al., 2006).

Furthermore, we can examine research in areas like health and disease to see that age and the aging process seems to have a significant impact on our perspectives. At earlier ages, positive images are more motivating as individuals approach a healthy lifestyle, suggesting a primarily promotion-focused view. As we age, positive *and* negative role-models are equally motivating, suggesting that as we get older, we are more likely to have a balanced promotion (healthy lifestyle) and prevention focus (avoidance of disease) (Lockwood, Chasteen, & Wong, 2005).

It then stands to reason that at younger ages, we are more likely to try on new and different perspectives and challenges, but over time as we become rewarded for being either promotion *or* prevention-focused by parents, co-workers, supervisors, children, and our societal norms and roles, we are less likely to have a singular promotion focus. Providing individuals early in their careers with significant developmental challenges and then support them when they fail at those challenges, is a very effective strategy for positively accelerating leadership development.

### **Motivation to Lead**

The possession of a promotion focus, geared towards attaining ideal end-states instead of concern for fulfilling obligations, is one factor in an individual's motivation to lead. Motivation to lead (MTL) affects a leader's decisions about undertaking leadership positions and sustaining the drive towards attaining the desired goals (Chan & Drasgow, 2001; Lapidot et al., in press). For an individual to gain leadership rich experiences, they must be motivated to take on those experiences in the first place. Although personality may play a large role in the emergence of leadership, as discussed further in the next

section, an individual's actual involvement as a leader will hinge on the decision to approach leadership opportunities and tasks (Chan & Drasgow, 2001).

Although motivation to lead has been determined to have stable aspects, when speaking in terms of emerging adults who are still developing those stable aspects, we have the opportunity to shape motivation to lead before it becomes ingrained. Further, once an individual has decided to take on a leadership role, the accumulated experience builds leadership efficacy, strengthening and reinforcing the motivation to lead (Bandura, 2000; Chan & Drasgow, 2001; Murphy, 1992, 2002). We would argue here that motivation to lead is likely more trait-like and open to development certainly early on in the life-span but maybe like some aspects of personality also later on as well with more concerted effort and support.

There are three components of motivation to lead: affective – where individuals *enjoy* the emotions that are part of the leadership experience; social-normative – where the individual takes on leadership roles because of a *sense of duty or need*; and noncalculative – where the individual does not think about the sacrifice that a leadership role may require, and thus, *does not think to avoid* leadership roles for this reason (Chan & Drasgow, 2001).

These different aspects of motivation to lead can be influenced by a focused leader development program that is part of the education of our very young leaders. Small and less challenging leadership roles that build the affective nature of MTL, that are ascended to because of a sense of duty, and that do not have high costs associated with them can build a positive leadership experience early on, thereby generating future leader role taking behaviors. In tandem, the antecedents of MTL such as personality,

cognitive ability, and socio-cultural values can all be tapped into to create greater amounts of leadership efficacy, again strengthening the chance that these emerging adults will continue to take on leadership roles as they develop.

The experiences that build motivation to lead can also be treated as additional resources that build upon each other. As stated earlier, this type of resource-building spiral is important in order to inoculate emerging leaders from decreased self-esteem if and when failure occurs (Hobfoll, 2002). Positive resources, coupled with goals that involve learning as well as achievement, can be one method by which these positive resource spirals are created. This idea is analogous to the broaden-and-build model of positive emotions, where the experience of positive emotions enlarges and enhances the thought-action repertoires individuals can access when faced with a problem (Fredrickson, 1998). By creating positive resources, in a similar vein to the positive psychology findings on different individual constructs, we are allowing our emerging leaders to experience failure in a way that leads to greater learning and future success instead of manifesting as dejection and forfeit. In addition to supporting a promotion focus by encouraging emerging leaders to try new things, and developing the resources with which they can achieve successful leader role occupancy, we must also focus on how each experience is stored within the complex views of the self.

### **Learning Goal Orientation**

Individuals can store their experiences based upon two different orientations, which are individual difference variables: learning goal and performance goal orientation (Dweck, 1986). Learning goal orientation is similar to a promotion focus, where the individual desires to increase competence incrementally (Boyce, 2004; Elliot & Dweck, 1988). A

performance goal orientation is more reflective of attaining a specific goal and receiving a positive evaluation – a task by task completion focus. Those with learning goal orientations are more concerned with adopting challenging goals and developing to their fullest capacity, while also being more persistent in pursuit of their set goals (Payne, Youngcourt, & Beaubien, 2007). Even when individuals with a learning goal orientation do not attain their goals, the experience of failure is still an important component of the challenge, and is stored as such. Furthermore, evidence suggests that individuals with learning goal orientations set more difficult goals, and attain them more often, than individuals with performance goal orientations (Payne et al., 2007). In addition, individuals with a learning goal orientation are more apt to seek feedback in order to continuously improve (Butler, 1993).

Further evidence from an empirical study shows that when individuals have learning goals, they are more satisfied with their tasks than if they are just told to “do their best” (Latham & Brown, 2006). Finally, once these learning goals are established, they seem to create higher levels of self-efficacy when setting out on a particular task (Latham & Brown, 2006).

Consequently, we should instill the idea of ongoing lifespan leader development in all emerging leaders, creating a learning goal orientation instead of a performance goal orientation. It is the difference between basing success on a momentary state of triumph versus undertaking a journey towards the ideal or possible self. If successful, we should see an increase in the amount of self-efficacy in our emerging leaders as they set out towards attaining some goal, and also a greater sense of satisfaction when that task is completed.



### **Leader Self-Efficacy**

Self-efficacy is the belief that individuals have about their ability to achieve specific goals (Bandura, 1986). There is a strong positive relationship between a learning goal orientation and self-efficacy, suggesting that if we can develop a learning goal orientation in our emerging leaders, they may be more apt to approach leadership roles, thus strengthening their efficacy in approaching future leadership opportunities (Hannah, Avolio, Luthans & Harms, 2008; Latham & Brown, 2006; Maurer, Wrenn, Pierce, Tross, & Collins, 2003; Murphy, 2002; Murphy & Ensher, 1999; Payne et al., 2007). If an individual takes a long-term, developmental approach to their journey towards leadership effectiveness, then each leadership opportunity should be looked at as a developmental event from which they can learn.

As leader developers, we must encourage our youth to approach leadership opportunities with the idea that each role they take can potentially enhance their learning ability and should allow them to approach future opportunities with more information, as well as with an open mind to development. Indeed, such early interventions may not only develop greater leadership potential, but they may also lengthen the time span in which such individuals are willing to entertain development.

### **Agentic Leader Efficacy (ALE)**

Many times, leader efficacy is studied as a one-dimensional construct, focusing on efficacy for managerial decision-making or efficacy towards attaining a specific goal. However, the theory of agentic leader efficacy takes a multidimensional and more complex approach, due to the intricate and diverse situations and relationships that leaders face throughout their development (Hannah, 2006; Hannah, et al., 2008). ALE is

defined as: “a leader’s appropriation of his or her role and environment (agency), and the self-schematic efficacy beliefs (confidence) in his or her perceived leadership capabilities to organize the positive psychological capabilities, motivation, means and courses of action required to attain effective, sustainable performance across a specific leadership domain” (Hannah, 2006). The agency aspect, or the individual taking ownership and responsibility for his or her leadership development, coupled with the efficacy, or belief that one can achieve success in a leadership role, work together to determine one’s leadership emergence. Furthermore, the resources or means with which one can carry out a leadership role are another important component of an individuals’ confidence in leading, which can establish success. All of these dimensions are integral to the continued leadership development of our future leaders.

*Agency.* Personal agency, or the accountability an individual feels for pursuing his or her own path (Bandura, 2001), is proposed as one of the foundational aspects of leadership emergence. This reinforces the idea that we must continue to impress upon our youth the belief that they are the instruments that creates their experiences, not just that they are unwilling participants as life happens to them (Bandura, 2001). Agency is composed of intention, forethought, self-reaction, and self-reflection (Bandura, 2001). In other words, when individuals become agents of their own paths, they have a purpose, they have thought about what they are doing in advance, they are motivated towards action, and when they are finished, they reflect on the experience to learn from it for future events.

*Beliefs.* Not only is it imperative that we instill the belief of agency in our emerging leaders, but also we must build up their confidence or efficacy in order to create

the belief that they can and will succeed at whatever leadership role they occupy. This suggests that as the leader develops these beliefs the domains in which they are confident they will be successful as a leader will expand. In general, efficacy has consistently shown a strong relationship with goal attainment and performance (Bandura, 1986; Stajkovic & Luthans, 1998). When individuals are highly efficacious, they believe they have the skills and resources necessary to attain the task set before them. Leader efficacy can be developed by creating smaller sub-goals that lead up to a larger goal; as each milestone is achieved, the individual will become more and more confident (Hannah et al., 2008).

The same spiral pattern that has been observed with gaining resources and positive emotions also holds true for developable capacities like leader efficacy. Each new achievement builds upon the last, creating a cache of resources that can be tapped into when something does not go as planned. Furthermore, coupling this development of leader efficacy beliefs with a learning goal orientation or a promotion focus helps to create the conditions where the individual never experiences true failure – something valuable is taken away from every event.

*Means Efficacy.* A third aspect of agentic leader efficacy - means efficacy – goes beyond the definition of self-efficacy to explain how the perceptions an individual has of the resources available to him or her will impact the confidence he or she has of completing the task (Eden, 1996; Hannah, 2006). These resources can include concrete things like money or assistance, but also includes things like time, the support team, and the specific skills that may be available elsewhere in the organization.

Agentic leadership efficacy is comprised of many facets, including the personal agency or ownership the potential leader has, the confidence in his or her own ability to achieve the set goals, and the confidence in the means or resources he or she can have access to in order to meet the set goals. Motivation to lead, a promotion focus, and a learning goal orientation may further aid in the creation and development of higher levels of agentic leader efficacy.

It is important to note that when individuals are higher in agency or leader self-efficacy, they are more likely to exhibit positive leadership behaviors and show greater levels of performance (Hannah, 2006; Hannah, et al., 2008). In addition higher levels of leadership self efficacy will also positively affect group efficacy (Hoyt, Murphy, Halverson, & Watson, 2003). Furthermore, interventions focused on building this capacity offer evidence that leader self-efficacy is highly developable through concentrated micro-interventions, and that the effects on performance are veritable (Hannah, 2006).

### **Cognitive Ability**

Cognitive ability is another construct with both genetic and developable aspects that underlie the creation and development of emergent leadership. This has been one capacity that has been consistently related to both leadership effectiveness and leadership emergence (Foti & Luch, 1992; Gerstner & Day, 1994; Hollander, 1992; Lord & Brown, 2004; Russell & Kuhnert, 1992; Wofford, Goodwin, & Whittington, 1998). Chipeur, Rovine, and Plomin (1990) found that genetics explained 51% of the variance associated with IQ level. Shared environments (participants growing up in the same house) accounted for 11% to 35% of that variance, depending on the relationship between the

subjects; and anywhere from 14% to 38% were attributed to non-shared environments or experiences (events not tied to the specific household). This evidence suggests that focused interventions designed to increase the intelligence of young adults could have an impact of up to 38% above that of heritable characteristics and the home environment (McGue & Bouchard, 1998).

Results from published data suggest that young adulthood is the most favorable time period within one's lifespan to have the largest impact on developing intelligence and perhaps general cognitive abilities. When twins grew older and apart, the impact of the shared environment approached zero, yet genetic factors became more important in adulthood (McGue & Bouchard, 1998). It has been hypothesized that this occurs as the individual moves from a period in his or her lifespan where experience is determined by others, to a period where experience is more self-directed (Plomin, DeFries, & Loehlin, 1977). Therefore, it is not only important for outside influences to trigger intellectual stimulation, but also to create the conditions whereby the individual will continue to seek intellectual stimulation throughout his or her lifespan. This idea ties into the concept of self-identity, which will be discussed in the next section.

### **DEVELOPING A LEADERSHIP SELF-IDENTITY**

Bandura's social learning theory describes four methods by which individuals learn: observational learning, mastery experiences, physiological and physical arousal, and social persuasion (Bandura, 1977). In the opening section, we described traditional methods of organizational succession planning, accompanied by the issues we face demographically by continuing to rely on these methods. In order to head off the looming

leadership shortage, we must take different approaches to leader development in order to have readily available leaders prior to their entry into full time careers in organizations.

### **Interventions Designed To Develop Leader Emergence**

First, it is important for young and emerging leaders to realize that they have personal agency, or control, over their own development in order to instill the most crucial aspects of developmental readiness. Second, young leaders should be exposed to successful leaders to take advantage of observational learning and social persuasion, and should be encouraged by those leaders to take on leadership roles, and to see them as developmental opportunities, thus compelling the emerging leaders to take on more of a learning goal orientation. Finally, our youth should have the opportunity to attain leadership positions in order to learn from both success and failure; situations which will build their leader self-efficacy. This seems warranted based on the evidence provided above with the twin studies that showed that having a variety of leadership roles and experiences predicted later leader emergence. We suspect these experiences provided a learning platform for shaping how the leader learned from those experiences and then took on new leadership challenges over time.

Furthering leadership development relies on creating a positive leader self-concept, where the individual continues to attempt developmental activities towards leadership attainment and effectiveness throughout the lifespan (Lord & Hall, 2005, see also Lord, Hall, & Halpin, this volume). One of the components of agency is the aptitude for self-reflection. We have presented ideas about how the implementation of a learning goal orientation might change how one views possible failures into learning experiences, from which individuals could glean important insights into their abilities and

shortcomings in order to achieve future leadership success. Reflection has always been an important part of this type of learning, and more recent research into the impact of trigger moments upon leadership development suggests continuous opportunities for individual growth.

### **Life Span Trigger Events**

The process of reflection has been studied often in the context of coping or grieving processes (King & Emmons, 1991; Pennebaker, 2004). However, applying reflection processes to the study of leadership is a newer method by which we believe we can foster more accelerated leadership development. When applied to coping or grief counseling, participants are encouraged to think back upon the event and to draw meaning from it in order to ease sadness and move towards a healthier perspective (Calhoun & Tedeschi, 2006; Pryzgoda, 2005). In leadership, it is proposed that a similar process can also help individuals move towards their actual leader self, but instead of focusing on trauma, the individual can look back at specific moments that mattered to their leadership development (Avolio & Luthans, 2006).

Oftentimes, leaders do not reflect upon these moments until a period of time has elapsed, which may impact the significance of the development that occurs as a result the experienced event. Yet, when leaders have a chance to self-reflect upon that moment, it is a powerful event that serves to strengthen future goals (Avolio & Luthans, 2006). These events or turning points stick out as an instant when an individual significantly transforms his or her thoughts or ideas about the self or the role that self plays in the larger picture of one's development (Avolio & Luthans, 2006). These events can be

related back to social learning theory, in that if one recognizes and is aroused by a trigger moment, it can change how one thinks about one's leadership effectiveness and potential.

If we apply this same methodology to adolescents and young adults – emerging leaders - the opportunities for growth will likely be more significant than when used with established leaders. These moments serve as examples of the personal agency that individuals can have over their reactions to specific events. We also know from prior literature that there are different types of moments that can be explored in developmental interventions: trigger moments, jolts, and life crises.

*Trigger Moments.* Trigger moments can be formal or informal experiences that impact an individual's development (Avolio & Luthans, 2006). The treatment of these moments can serve as a powerful tool, instilling and expanding one's developmental readiness. How an individual responds to a trigger moment, either when it occurs or upon reflection at a later time, can impact the individual's self-regulatory focus, motivation to lead, goal orientation, and leader self-efficacy.

Many successful leaders, when reflecting back on their experiences, can describe particular trigger moments throughout their lives that shaped their future. Unfortunately, many times this reflection occurs years after the moment occurred, reducing the impact on the potential development. Therefore, it is important to build these developable moments into the lifespan experiences of our young leaders in order to shape them into future leaders, harnessing the power of trigger moments from the time in which they occur to move the leader towards their actual leader self concept.

*Jolts.* Jolts are another type of moment that matters – defined as events or triggers that stimulate growth (Spreitzer, 2006). These types of moments may be a little more



severe than trigger moments, but they do not necessarily have to be negative – they are just occurrences that are a departure from the status quo that lead to a rethinking of the current self (Spreitzer, 2006). Jolts can push individuals or organizations out of a state of inertia, creating an opportunity for change and rejuvenation (Haunschild & Rhee, 2004). Where individuals reflect upon trigger moments at a later time, they can be shaken out of a routine by jolts, which can be utilized to facilitate change.

It is the recognition of jolts, and the knowledge of what positive growth can come out of them, that creates opportunities for leadership development (Spreitzer, 2006). In order to prepare potential leaders for these types of life-changing events, we must start to describe how seizing an opportunity often leads to greater growth than expected in our young leaders.

*Life Crises.* Life crises are the most catastrophic type of moment, categorized as a personal experience which may be incredibly distressing (Raphael, 1981). Oftentimes, individuals cope with these events with shock, denial, or helplessness. In these times, clinical psychologists have determined that when individuals go through a meaning-making process to sort out the events, they are more likely to recover and integrate the event back into their own life (Raphael, 1981). Much of the early work on resilience suggests that children have a remarkable tendency to bounce back from trauma early in their life span, and therefore, as leader developers attempting to capitalize on the leadership potential of each individual, we must instill the idea that even when a crisis is experienced, it can have a positive outcome.

A recent qualitative study of interviews with 125 leaders suggests that life crises are often a critical component of successful leadership (George, Sims, McLean, & Mayer,

2007). These crises, including job loss, illness, deaths of loved ones, exclusion from a particular group, discrimination, and rejection, may have served as tests of the leader's abilities, often further strengthening the resolve that allowed forward progress as a leader.

The data collected from these leaders reinforces what we have discussed above, that personal agency, learning goal orientation, promotion focus, as well as the ability to take an event and make meaning of it for future success are all important components of leadership emergence and effectiveness (George, et al., 2007). Perhaps even more important is examining how these leaders negotiated these crises that might be expected to derail any reasonable person from a positive life-span development path. It certainly seems as though the framing process they used to create positive meaning out of catastrophe is a critical ability for success, and conceivably, the more this meaning making process is practiced with smaller trigger moments and jolts, the more likely it will be successfully used when faced with crisis.

### **Developing Leaders through Moments That Matter**

We have described three types of moments that could occur in any individual's life; trigger moments, jolts, and life crises. Recognizing that each of these could be experienced at different times throughout the lifespan, we suggest that these types of events could be incredible tools for the learning and development of future leaders. Specific interventions could focus on creating trigger moments from which emerging leaders can learn, whereas other interventions could concentrate on arming future leaders with the capabilities to cope with jolts or life crises. Therefore, a comprehensive developmental program that focuses on these moments that matter to both established and

emerging leaders, instituted in elementary, secondary and collegiate education may begin to facilitate the development of a broader cadre of future leaders.

With all of these interventions, it is important to continually stress the developable nature of leadership, the potential each individual has to become a successful leader, and the agency that each individual has over their own leadership development. Further acceleration of leadership potential can be fostered through the combination of a promotion focus, a learning goal orientation, and the creation of motivation to lead. All of these tools can help us to create each individual's possible "leader self" from an early age to its fruition.

A final observation is that the context is an important component in both the ascension to a leadership role and success within that role (Avolio, 2007). Leadership is a complex phenomenon, requiring interplay between the leader, the follower, and the situation in which the actors reside (Marion & Uhl-Bien, 2001). Throughout this chapter, we have discussed harnessing the potential that each individual has to become a leader as early in the life span as possible in order to capitalize on it before things become too static. The convergence of ideas surrounding creating a learning goal orientation, reinforcing a promotion focus, fostering leadership efficacy, and developing one's motivation to lead are in a sense preparing our future leaders for success no matter what the situation may require.

We are suggesting that as our emerging leaders create their leader possible selves throughout their formative years, they may have a more dynamic ability to bring forth the leadership qualities important to a specific situation. In this sense, we are arming our future leaders, as suggested by Lord and colleagues (2001), to respond to various

leadership conditions, which may be created by the leaders, followers, events, locations, temporal issues, societal needs, etc. Furthermore, as we continue to examine the developable aspects of leadership while capitalizing on the genetic components an individual already possesses, we can also maintain a focus on the contextual factors that might draw some of these specific characteristics to the forefront (Arvey et al., 2006; Avolio, 2007). Continued examination of all of these leadership components will allow us to more accurately develop emerging leaders into both successful leaders and followers.

### **CONCLUSION**

We have a shortage of leadership talent on our horizon, and we need to take drastic steps to adjust our leadership succession planning methods in order to avoid a leadership crisis. Although genetics have been shown to have some impact on leader role emergence, more dynamic factors comprising developmental readiness - such as self-regulatory focus, motivation to lead, learning goal orientation, and leader self-efficacy - are of the utmost importance to leader development and emergence. In this regard, we can start with the assumption that each and every member of our future generation of youth has the opportunity and the ability to make an impact as an effective leader. However, harnessing that probability and instilling leadership capabilities in those individuals is the challenge that we now face well into the future. We suggest that by persuading our future leaders to take a promotion focus, be motivated to take on leadership roles, have a learning goal orientation, and by building leadership self-efficacy through feedback and encouragement, we can allow each leader to attain his or her fullest positive leadership potential, or best possible self. In addition, developmental sessions focused on the idea of

moments that matter can have a significant impact on the capabilities of our youth to approach the highest amounts of developmental readiness with relatively minimal investment.

## REFERENCES

- Arvey, R. D., Rotundo, M., Johnson, W., & McGue, M. (2006). The determinants of leadership role occupancy: Genetic and personality factors. *The Leadership Quarterly, 17*(1), 1-20.
- Arvey, R. D., Zhang, Z., Avolio, B. J., & Krueger, R. (2007). Developmental and genetic determinants of leadership role occupancy among females. *Journal of Applied Psychology, 92*(3), 693-706.
- Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. *American Psychologist, 62*, 25-33.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly, 15*, 801-823.
- Avolio, B.J., & Hannah, S.T. (2008). Developmental readiness: Accelerating leadership development. *Consulting Psychology Journal, 60*, 331-347.
- Avolio, B. J., & Luthans, F. (2006). *The high impact leader: Moments matter in accelerating authentic leadership development*. New York, NY: McGraw-Hill.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, N.J.: Prentice-Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, N.J.: Prentice-Hall.

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In E. A. Locke (Ed.), *The Blackwell handbook of principles of organizational behavior* (pp. 154-196). New York: Guilford.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Bass, B. M., & Riggio, R., E. (2006). *Transformational leadership* (2nd ed.). Mahweh, NJ: Lawrence Erlbaum & Associates.
- Boyce, L. A. (2004). *Propensity of self-development of leadership attributes: Understanding, predicting, and supporting leader self-development performance*. George Mason University, Washington, D.C.
- Butler, R. (1993). Effects of task and ego achievement goals on information-seeking during task engagement. *Journal of Personality and Social Psychology*, 65, 18-31.
- Byham, W. C. (1999). Executive help wanted, inquire within: The leadership dearth is the real dilemma. *Employment Relations Today*, 26(3), 17-27.
- Calhoun, L. G., & Tedeschi, R. G. (2006). The foundations of posttraumatic growth: An expanded framework. In *Handbook of posttraumatic growth: Research & practice*. (pp. 3): Mahweh, NJ: Lawrence Erlbaum & Associates.
- Carver, C. S., & Scheier, M. F. (2005). Optimism. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 231-243). Oxford: Oxford University Press.

- Chan, K.-Y., & Drasgow, F. (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. *Journal of Applied Psychology*, 86(3), 481-498.
- Changing global demographics. (2003). Retrieved September 3, 2010 from [http://www.klminc.com/marketing/changing\\_global.html](http://www.klminc.com/marketing/changing_global.html)
- Chipeur, H.M., Rovine, M.J., & Plomin (1990). LISREL modeling: Genetic and environmental influences on IQ revisited. *Intelligence*, 14, 11-49.
- Conley, J. J. (1984). The hierarchy of consistency: A review and model of longitudinal findings on adult individual differences in intelligence, personality, and self-opinion. *Personality and Individual Differences*, 5, 11-25.
- Day, D. (2000). Leadership development: A review in context. *The Leadership Quarterly*, 11(4), 581-614.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.
- Eden, D. (1996). *From self-efficacy to means efficacy: Internal and external sources of general and specific efficacy*. Paper presented at the 56th Annual Meeting of the Academy of Management (Organizational Behavior Division), August, Cincinnati, Ohio.
- Elliot, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, 71, 5-24.
- Foti, R. J., & Luch, C. H. (1992). The influence of individual differences on the perception and categorization of leaders. *The Leadership Quarterly*, 3(1), 55-66.

- Fraley, R. C., & Roberts, B. W. (2005). Patterns of continuity: A dynamic model for conceptualizing the stability of individual differences in psychological constructs across the life course. *Psychological Review*, *112*(1), 60.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, *2*(3), 300-319.
- Gardner, J. W. (1990). *On leadership*: New York: The Free Press.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F., O. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The Leadership Quarterly*, *16*(3), 343-372.
- George, B., Sims, P., McLean, A. N., & Mayer, D. (2007). Discovering your authentic leadership. *Harvard Business Review*, *February*, 129-138.
- Gerstner, C. R., & Day, D. V. (1994). Cross-cultural comparison of leadership prototypes. *The Leadership Quarterly*, *5*(2), 121-134.
- Hannah, S. (2006). *Agentive leadership efficacy: Test of a new construct and model for development and performance*. Dissertation Lincoln, NE: University of Nebraska – Lincoln.
- Hannah, S.T., Avolio, B.J., Luthans, F., & Harms, P.D. (2008). Leadership efficacy: Review and future directions. *The Leadership Quarterly*, *19*, 669-692.
- Haunschild, P. R., & Rhee, M. (2004). The role of volition in organizational learning: The case of automotive product recalls. *Management Science*, *50*(11), 1545.
- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, *52*, 1280-1300.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513.



- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology, 6*(4), 307.
- Hollander, E. P. (1992). Leadership, followership, self, and others. *The Leadership Quarterly, 3*(1), 43-54.
- House, R. J., & Podsakoff, P. M. (1994). Leadership effectiveness: Past perspectives and future directions for research. In J. Greenberg (Ed.), *Organizational behavior: The state of the science* (pp. 45-82). Hillsdale, N.J.: Erlbaum.
- Hoyt, C. L., Murphy, S.E., Halverson, S.K., & Watson, C.B. (2003). Group Leadership: Efficacy and Effectiveness. *Group Dynamics, 7*(4), 259-274.
- Johnson, A. M., Vernon, P. A., Harris, J. A., & Jang, K. L. (2004). A behavior genetic investigation of the relationship between leadership and personality. *Twin Research, 7*(1), 27.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology, 87*, 765-782.
- King, L. A., & Emmons, R. A. (1991). Psychological, physical, and interpersonal correlates of emotional expressiveness, conflict, and control. *European Journal of Personality, 5*, 131-150.
- Lapidot, Y., Kark, R., & Shamir, B. (2007). The impact of situational vulnerability on the development and erosion of followers' trust in their leader. *The Leadership Quarterly, 18*(1), 16-34.

- Latham, G. P., & Brown, T. C. (2006). The effect of learning vs. Outcome goals on self-efficacy, satisfaction and performance in an MBA program. *Applied Psychology: An International Review*, 55(4), 606-623.
- Lockwood, P., Chasteen, A. L., & Wong, C. (2005). Age and regulatory focus determine preferences for health-related role models. *Psychology & Aging*, 20(3), 376.
- Loehlin, J. C., McCrae, R. R., Costa, P. T., Jr., & John, O. P. (1998). Heritabilities of common and measure-specific components of the big five personality factors. *Journal of Research in Personality*, 32(4), 431.
- Loehlin, J. C., & Nichols, R. C. (1976). *Heredity, environment, & personality: A study of 850 sets of twins*. Austin, Texas: University of Texas Press.
- Lord, R. G., & Brown, D. J. (2004). *Leadership processes and follower self-identity*. Mahwah, NJ: Erlbaum.
- Lord, R. G., DeVader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology*, 71, 402-410.
- Lord, R. G., & Hall, R. J. (2005). Identity, deep structure and the development of leadership skill. *The Leadership Quarterly*, 16(4), 591.
- Lord, R.G., Hall, R.J., Halpin, S. (2011). In S.E. Murphy & R.J. Reichard, (Eds.) (2010). *Early development and leadership: Building the next generation of leaders*. New York: Psychology Press/Routledge.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*. 60, 541–572.

- Luthans, F., Avey, J.B., Avolio, B.J., Norman, S.M., & Combs, G.M. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behaviour*, 27, 387–393.
- 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, 1, 41-67.
- Manian, N., Papadakis, A. A., Strauman, T. J., & Essex, M. J. (2006). The development of children's ideal and ought self-guides: Parenting, temperament, and individual differences in guide strength. *Journal of Personality*, 74(6), 1619.
- Marion, R. & Uhl-Bien, M. (2001), Leadership in complex organization. *Leadership Quarterly*, 12: 389-418
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38, 299-337.
- Masten, A. S., & Reed, M.-G. J. (2002). Resilience in development. In C. R. Snyder & S. Lopez (Eds.), *Handbook of positive psychology* (pp. 74-88). Oxford.
- Maurer, T. J., Wrenn, K. A., Pierce, H. R., Tross, S. A., & Collins, W. C. (2003). Beliefs about 'improvability' of career-relevant skills: Relevance to job/task analysis, competency modeling, and learning orientation. *Journal of Organizational Behavior*, 24, 107-131.
- McCrae, R. R., & Costa Jr, P. T. (1994). The stability of personality: Observations and evaluations. *Current Directions in Psychological Science*, 3(6), 173.
- McGue, M., & Bouchard, J. T. J. (1998). Genetic and environmental influences on human behavioral differences. *Annual Review of Neuroscience*, 21(1), 1.

- Murphy, S.E. (1992). *The contribution of leadership experience and self-efficacy to group performance under evaluation apprehension*. Unpublished doctoral dissertation, University of Washington.
- Murphy, S.E. (2002). Leader self-regulation: the role of self-efficacy and ‘multiple intelligences’. In R. Riggio, R., S.E. Murphy, & F. Pirozzolo (Eds.) *Multiple intelligences and leadership* (pp.163–186). Mahwah, NJ: Lawrence Erlbaum Associates.
- Murphy, S.E., & Ensher, E. A. (1999). The effects of leader and subordinate characteristics in the development of leader-member exchange quality. *Journal of Applied Social Psychology, 29*, 1371-1394.
- 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.
- Pennebaker, J. (2004). Expressive writing therapy. *Psychosomatic Medicine, 66*(2), 272-275.
- Plomin, R., DeFries, J. C., & Loehlin, J. C. (1977). Genotype-environment interaction and correlation in the analysis of human behavior. *Psychological Bulletin, 84*(2), 309.
- Pryzgoda, J. (2005). *Positive growth following a traumatic life event: An analysis of cognitive responses, coping, and social support*. ProQuest Information & Learning.
- Raphael, B. (1981). Personal disaster. *Australian and New Zealand Journal of Psychiatry, 15*(3), 183.

- Riegel, K. F. (1975). Toward a dialectical theory of development. *Human Development*, 18, 50-64.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality traits from childhood to old age: A quantitative review of longitudinal studies. *Psychological Bulletin*, 126(1), 3.
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 132(1), 1.
- Russell, C. J., & Kuhnert, K. W. (1992). Integrating skill acquisition and perspective taking capacity in the development of leaders. *The Leadership Quarterly*, 3(4), 335-353.
- Schneider, M. (2002). A stakeholder model of organizational leadership. *Organization Science*, 13(2), 209.
- Snyder, C. R. (2000). *Handbook of hope*. San Diego: Academic Press.
- Sorcher, M. & Brant, J. (2002). Are you picking the right leaders? *Harvard Business Review*, 80 (2), 78-85.
- Spreitzer, G. M. (2006). Leading to grow and growing to lead: Leadership development lessons from positive organizational studies. *Organizational Dynamics*, 35(4), 305.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, 124, 240-261.

- Stewart, J. H. (2005). Foreign language study in elementary schools: Benefits and implications for achievement in reading and math. *Early Childhood Education Journal, 33*(1), 11.
- Walumbwa, F.O., Peterson, S.J., Avolio, B.J., & Hartnell, C.A. (in press). An investigation of the relationships between leader and follower psychological capital, service climate and job performance. *Personnel Psychology*.
- Wofford, J. C., Goodwin, V. L., & Whittington, J. L. (1998). A field study of a cognitive approach to understanding transformational and transactional leadership. *The Leadership Quarterly, 9*(1), 55-84.