



The benefits of a long-lens approach to leader development: Understanding the seeds of leadership

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ABSTRACT

Although research has identified techniques for leader development, most of the extant research has focused on development in adulthood, ignoring development at an early age. A recent resurgence in interest in the genetic or other early development factors, such as attachment, points to the benefits of understanding the developmental trajectories (Day, Harrison, & Halpin, 2009) of individuals throughout adulthood. This paper argues for an examination of the earliest “seeds” of leader development. In this paper we present a framework that explores the tasks of leadership at various ages before adulthood, the skills required to accomplish these tasks, and the mechanism by which younger leaders develop these skills. In understanding what skills and what features of leadership identity have long roots, we can begin to understand more fully the developmental needs of adults. Without a more comprehensive look at leadership over the lifespan, leader development practices will not meet their full potential.

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1. Introduction

Developing leaders and leadership capacity is more important than ever to organizations. Leaders in for-profit and non-profit industries are challenged to exhibit effective leadership in a number of ways. Leaders must be prepared to make the right decisions, set the correct direction for their organizations to succeed, and avoid ethical missteps. To prepare these leaders, organizations focus on development opportunities that include building skills, increasing self-awareness, and identifying actions and methods for improvement (Van Velsor, McCauley, & Ruderman, 2010). Although research suggests that individuals are able to improve their leadership skills, the effect sizes for many developmental programs still remain low (Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009; Avolio, Rotundo, & Walumbwa, 2009). However, in the last 20 years, research has uncovered some of the factors that impact leader development including the effects of leadership identity, the importance of adult development, and the role of expertise (Day, Harrison, & Halpin, 2009).

One limitation to our understanding of leader development is the focus on developmental experiences that occur late in life. Most studies on leader development examine managers and executives, ignoring development in youth and adolescence (Murphy, 2011). Yet, leaders are likely to have had developmental experiences well before reaching mid-management and these early development experiences are important for adulthood. At the most obvious level, engaging in leadership roles as an adolescent improves one's chances of getting into college and has a positive impact on future earnings (Kuhn & Weinberger, 2005). In addition to the direct benefit of leader experience on these outcomes, we argue that early experiences create the foundation for future leadership development to build on. There are two main reasons why this might be the case: the greater ability for development to occur at a young age and the self-reinforcing nature of leader development.

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First, it is possible that development occurs more readily in childhood and adolescence than in adulthood because one's behavior, personality, and skills are more malleable at a young age than in adulthood. Indeed, researchers have argued for the likelihood that some skills may be more important to develop early on (Avolio & Vogelgesang, 2011; Gardner, 2011). We argue that early points in life represent a sensitive period for development. Unlike a *crucial period* (which is a period by which an ability must be developed or it cannot occur), *sensitive periods* reflect a time in life when skills are more easily and rapidly developed (Bornstein, 1989). Moreover, development that occurs in this sensitive period need not be seen immediately; instead, the effects of early influences may only become easily observed in adulthood (Bornstein, 1989). A sensitive period does not preclude future development from being influential, nor does it guarantee successful development. Rather, receiving adequate development during the sensitive period (when greatest change is occurring) sets the stage for future development to occur, barring unforeseen influences.

Second, one's development to eventually become a leader is a self-reinforcing process. For example, as one gains greater leadership efficacy, or confidence in one's ability to lead a group, that individual is more likely to engage in leadership experiences, which will serve to increase the individual's leadership efficacy (Hannah, Avolio, Luthans, & Harms, 2008). Likewise, when one has leadership experience, others' expect him or her to be a leader, creating a self-fulfilling prophecy effect for that leader (e.g., Eden, 1993). A self-fulfilling prophecy is when others' high expectations for another cause that individual to meet those high expectations because of increased attention, access to resources, or self-efficacy (Eden, 1993). Therefore, analogous to a snowball effect, small developmental experiences at an early age (when the snowball is small) can have a profound impact on future development outcomes, given the reinforcing nature of leader development.

1.1. Lack of research on youth leader development

Despite the potential importance of leader development in the early years, there is a dearth of research on leader development activities or leadership effectiveness before college. With few exceptions, most studies on college students ask them to play the role of leaders in workgroups and those studies that focus on actual college student leader development tend to be published in journals of higher education (e.g., Komives, 2011; Sternberg, 2011). For example, a search of all articles published in *The Leadership Quarterly* revealed ten papers that focused on youth leadership directly, or indirectly as a topic (Arvey, Rotundo, Johnson, Zhang, & McGue, 2006; Avolio, Rotundo, & Walumbwa, 2009; Bartone, Snook, Forsythe, Lewis, & Bullis, 2007; Keller, 2003; Ligon, Hunter, & Mumford, 2008; Popper & Amit, 2009; Popper & Mayselless, 2003; Popper, Mayselless, & Castelnovo, 2000; Schneider, Ehrhart, & Ehrhart, 2002; Schneider, Paul, White, & Holcombe, 1999). A more targeted search by developmental stage in the *Journal of Adolescence* revealed only three articles with leadership in the title, all published in the early 1990s. Although a number of studies were published in the 1930s through 1950s that examined the role of youth personality characteristics in later leadership emergence or success (Bass & Bass, 2008); more recent work focuses exclusively on gifted students (Schneider et al., 1999). However, there do seem to be a number of recent studies that isolate some aspects of children's personalities (e.g., dominance, extraversion, and social competence) that are related to leadership ratings by teachers or peers (Barner-Berry, 1982; Edwards, 1994; Hartup, 1983; Hawley, 2002; Lease, Musgrove, & Axelrod, 2002; Recchia, 2011; Shin, Rechhia, Lee, Lee, & Mullarkey, 2004; Strayer & Strayer, 1980).

One possible reason for the lack of systematic study of leadership through the lifespan is that there are no theoretical models of leader development that incorporate these younger years. Although Avolio and Gibbons (1988) presented a model of transformational leader development which took a lifespan perspective, there was limited follow-up research on the lifespan aspects of the model. Of the limited work on early life influences on leadership, most has used a "snapshot" approach to understanding the effect of early influences on leadership outcomes, examining the relation between children's attributes and leadership at the same point in time (e.g., Recchia, 2011), or examining the relation between stable character traits developed in childhood and adult leadership outcomes (Amit, Popper, Gal, Levy, & Lisak, 2009; Keller, 2003; Popper, 2011). Another approach, similar to a biographical data approach (e.g., Cascio & Aguinis, 2011), has examined the relation between current leadership outcomes and past life events, recalled in the present time (Bartone et al., 2007).

Although these studies, albeit all very recent, should be commended for beginning to examine this important question, they still ignore the dynamic nature of leader development over time. By examining the correlation between Time 1 factors (in childhood) with Time 2 factors (in adulthood), the implicit assumption is that the developmental trajectory has been unwavering. Or, at the least, the studies ignore the effects of changes in the developmental trajectory. Yet, one innovative study of the life narratives of 120 notable leaders looked for events in a leader's life (e.g., turning-points or redemption events) that provided the leader with the opportunity to change his or her developmental course (Ligon et al., 2008). That study highlights the importance of considering a longitudinal perspective on leader development to elucidate the dynamic nature of leader development.

1.2. A model of leader development across the lifespan

Therefore, we propose a model of leadership development across the lifespan which accounts for the dynamic and iterative processes associated with the development of leadership (Fig. 1). The model begins with early developmental factors that shape leaders' development over time. Specifically, we focus on genetics, parenting style, and early learning experiences and early leadership experiences (e.g., sports, school, practice). Needless to say, this is not an exhaustive list of all early experiences that might impact leadership development. Of note, we do not include moral development in this model. Although it is essential to leadership development, the extensive literature on children's moral development does not permit us to include it in this paper.

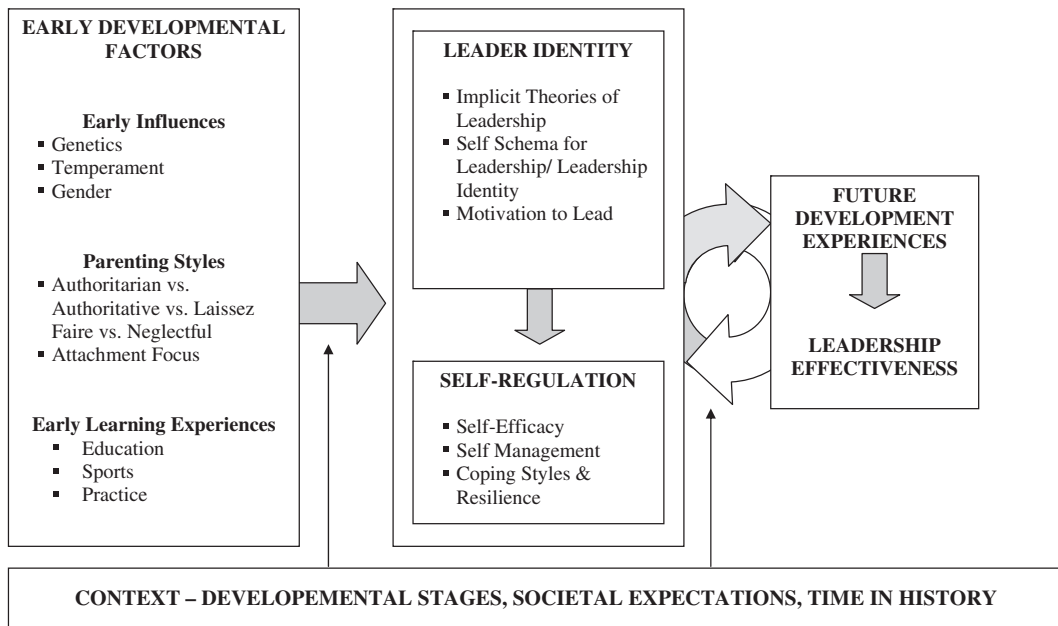


Fig. 1. A life span approach to leader development.

Moreover, the relative importance of moral and ethical development differs depending on the leadership theory being examined (e.g., authentic, spiritual) and given our broad conceptualization of leadership, is difficult to discuss here.

The second box in the model includes dynamic development including the development of a leadership identity, and self-regulatory activities (Markus & Wurf, 1987). Leadership identity is one facet of an individual's overall identity specific to leadership, which includes one's self schema as to what a leader does and also an evaluation of one's effectiveness (Day et al., 2009; Lord & Hall, 2005; Lord, Hall, & Halpin, 2011; Murphy, 2002), and is included as an essential outcome of leadership development (Day & Harrison, 2007). Moreover, Lord and Hall (2005) argue that leader identity is essential for leader skill development. Consistent with other models of leadership development, we also include the development of self-regulatory capabilities as a proximal outcome of leader development experiences (e.g., Gardner, Avolio, Luthans, May, & Walumbwa, 2005; Murphy et al., 2008). Self regulation is when "the self is active, involved, and responsive, intentionally engaging in volitional processes to change, alter, or modify itself" (Baumeister & Vohs, 2003, pg. 197). Moreover, this regulation can drive peoples' motivation to become the persons they want to be or should be (Banaji & Prentice, 1994). Again, this is not an exhaustive list of all possible outcomes of early development experience but these two aspects (leadership identity and self-regulation) are the most consistently cited outcomes of leadership development (e.g., Gardner et al., 2005) and have strong links to leadership effectiveness outcomes and engagement in future development activities (Avolio & Hannah, 2008).

The third box in the model includes the outcomes of engagement in future leadership development and leadership effectiveness. Although there is no universal definition of effective leadership, leadership is generally defined as a type of social influence through which one successfully garners the help and support of others to achieve a common goal (Chemers, 2002). We must note that the model includes a component of time, so effectiveness is dependent on one's developmental stage. We do not adopt any specific theory of leadership (e.g., authentic leadership, transformational leadership) or leadership in any specific sector or industry (e.g., military, nonprofit, business, civic, religious). Instead, we believe that this model is broad enough to encompass all types of leadership, although delineations of the model into different types of leadership could prove fruitful. Also included in this third box are "future development experiences." Like leadership, there is no unifying theory of leadership development (Avolio & Hannah, 2008; Day, 2000), but we generally define future leadership development experiences as those that increase skills, abilities, and competencies in an interpersonal context, such as: flexibility, teambuilding, change management, self-awareness, or interpersonal skills (Day & Harrison, 2007). Future development could take the form of classes, leadership experiences, mentoring relationships, or self-exploration.

It should be noted that the arrow connecting leader identity and self-regulatory capabilities with future leader development and leader effectiveness is a circular one. This is meant to signify the reinforcing nature of leader development. Although not specifically tested in previous research, we believe that this relationship will be self-reinforcing given that identity and self-regulatory skills lead to increased interest in leader development and leader development leads to increased self-regulatory skills toward that end (Hannah et al., 2008). Likewise, self-fulfilling prophecy effects may occur such that others begin to expect leadership from an individual, causing that individual to enact the leadership role (Eden, 1993). Conversely, negative leadership experiences can hurt one's leader identity, causing him or her to engage in less leadership development in the future and become less effective as a leader.

Moving to the contextual factors, we argue that societal expectations, time in history, and the age at which some developmental experiences occur impact the extent to which those experiences result in greater growth of the leader identity and self-regulatory capabilities (see also Fig. 1). Likewise, these factors can impact the extent to which one's leadership identity and self-regulatory capabilities result in effective leadership and the continuation of developing leadership. For example, one might have a strong leadership identity at a young age that does not result in effective leadership in adulthood because societal biases about race or gender prohibited that individual from engaging in additional development in adulthood.

2. Early developmental factors

2.1. Genetics and temperament

In this paper, we focus most heavily on the first half of the model, given that the majority of research on leadership development focuses on the latter half of the model (e.g., Avolio & Hannah, 2008). By beginning our focus on leadership with genetic influences, or at least very early environmental influences on leadership, we may uncover the types of leadership skills that are the roots or seeds of leader development. In this section, we discuss what we believe to be the ontogeny of leadership development: genetics, attachment style, and parenting style. These are all influences that are largely outside of the control of the individual, but set the stage for future leader development.

2.1.1. Genetics

Recent research has turned to genetics as an important predictor of leadership. Studies using databases of identical twins reared apart, identical twins reared together, and fraternal twins have shown that there is a component of leadership that appears to be traceable to genetic factors (Arvey & Chaturvedi, 2011). Some studies look at personality factors thought to predict leadership effectiveness, whereas others examine genetic components of transformational leadership. As a whole, these studies suggest that anywhere from 30 to 59% of the variance in transformational leadership, or personality characteristics predictive of transformational leadership, can be attributed to genetic factors (Arvey et al., 2006; Arvey, Zhang, Krueger, & Avolio, 2007; Ilies, Gerhardt, & Le, 2004; Johnson et al., 1998; Johnson, Vernon, Harris, & Jang, 2004). Most leadership researchers agree that even if genetics plays a large role in determining leader emergence or leader effectiveness, there is still approximately 50 to 70% of variability in these outcomes that is explained by other factors. Therefore, it is important to look at other early influences in the child's environment that enhance the skill set for leadership.

2.1.2. Temperament

Evident in infancy, temperament can also impact future leader development. From the children's earliest days, parents begin to label their children according to types: shy child, active kid, happy baby. Behaviors that are most often attributed to a temperamental bias in infancy and early childhood include "irritability, smiling, motor activity, and adaptability to new situations [an approach or avoidant posture to unfamiliar events]." (Kagen, 1989, p. 668). Temperament is thought to be both a function of genetic hardwiring and prenatal factors. For example, a large majority of individuals who are shy and emotionally subdued as infants, (approximately 15% in the second year of life) go on to be shy children through their eighth year of life (Kagen, 1989). It is easy to see how these temperament dimensions provide a stable developmental trajectory for other factors of personality that would influence leadership effectiveness. For example, Recchia (2011) demonstrated that children's personalities (e.g., dominance, extraversion, and social competence), which may be influenced by temperament, predicted leadership ratings of teachers or peers.

2.2. Birth order, parenting styles, and attachment

2.2.1. Birth order and age

Although not predisposed by genetics, factors related to children's birth order and month of birth can also impact their leader development. For example, an individual's attachment style with parents has been shown to impact implicit theories and in turn the type of leader one becomes (Keller, 2003). Likewise, birth order, family size, and parental attention have been implicated as predictors of leadership (Bass & Bass, 2008). Other characteristics, such as a child's age relative to his or her peers, may also impact children's development. In Malcolm Gladwell's (2008) book *Outliers*, he summarized research about the success that soccer and hockey players enjoy just by being older than others on their teams (Musch & Grondin, 2001). In addition, children who have birthdays early in the school-year, and are therefore "old" for their grade tend to be more academically successful all the way through college, compared to children who are "young" for their grade (Bedard & Dhuey, 2006). Relative age has also been shown to affect leadership. Dhuey and Lipscomb (2008) found that high school students who are relatively old for their grades were more likely to emerge as high school leaders.

2.2.2. Parenting styles

According to some research, parents play a major role in the development of children:

"[Parents...] contribute to their children's religious beliefs, intellectual and occupational interests, feelings of self-esteem or inadequacy, adherence to traditional or modern notions of masculinity and femininity, helpfulness to others, skills, and values (Beer, Arnold, & Loehlin, 1998; Kruger, Hicks, & McGue, 2001; McCrae et al., 2000)" (Wade & Tavis, 2008, p. 502).

This is not to say that peers do not hold some sway in affecting other aspects of a child's development, especially during adolescence (e.g., [Pinker, 2003](#) and others), but parents undoubtedly work to influence their children's thoughts on leadership, through role modeling leadership and through the leader behaviors and experiences they encourage in their children. According to research in child development, parenting style is often categorized into four types: authoritarian, neglectful, indulgent, and authoritative ([Santrock, 2010](#)). An authoritarian parent may be punitive, and characteristically demanding with firm rules and control. Unfortunately, this type of parenting is unlikely to result in leader skills related to innovation, communication, and entrepreneurship. Research suggests that teenagers with authoritarian parents are socially incompetent and tend to have poor communication skills ([Baumrind, 1991](#)). Other styles of parenting that do not bode well for the aspiring leader include neglectful and indulgent styles. Neglectful parents, who play a small role in parenting their children (utilizing excessive television and videogames to do the parenting), tend to have teenagers with low social competence coupled with poor self control. Indulgent parents, who provide warmth with few restraints (think of the fun parents who have all the neighborhood kids wanting to hang out at their home because “anything goes”), often produce creative adolescents who have little self-control and low social competence.

Authoritative parents on the other hand produce teenagers most likely with the best chance for becoming effective leaders ([Murphy, 2011](#); [Popper, 2011](#)). These parents encourage independence with limits. “They monitor and impart clear standards for their children's conduct. They are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive, rather than punitive. They want their children to be assertive as well as socially responsible, and self-regulated as well as cooperative” ([Baumrind, 1991, p. 62](#)). An authoritarian parent, on the other hand, would be sure to tell their children with whom they could hang out, what they could or could not do, and the severe consequences for failing to meet any of those rules. The rules would remain static and would be backed up by “because I said so.” Teens with authoritative parents, who are given increasing independence as they mature, tend to be more socially competent and self-reliant than teens raised under other parenting styles ([Baumrind, 1991](#)). [Avolio, Rotundo, and Walumbwa \(2009\)](#) showed that, after controlling for genetic factors, authoritative parenting was related to leader emergence.

2.2.3. Attachment style

Often attributed to parenting style or parental factors, children's attachment style is well formed at an early age but is predictive of future leadership outcomes ([Popper, 2002](#); [Popper et al., 2000](#); [Popper & Maysseless, 2003](#)). In early life, the bond infants have with their caregivers can vary from a secure to insecure attachment style ([Bowlby, 1982](#)). [Ainsworth, Blehar, Waters, and Wall \(1978\)](#) identify three styles of infant attachment, one secure and two insecure (ambivalent and avoidant) which influence later functioning in relationships. According to this stream of research, individuals with a secure attachment style are characterized by adaptable psychosocial functioning as an adult because they have the ego resources required for taking on leadership roles. Individuals with an insecure attachment style lack the ego resources needed for leadership and, therefore, will not seek out leadership positions and will not be perceived as leaders. Moreover, a secure attachment style allows one to engage in more effective leadership as evidenced by increased transformational leadership in those with secure parental attachment style from childhood (e.g., [Mack et al., 2011](#); [Popper, 2011](#)).

2.2.4. Summary

In summary, it is clear that genetics and early influences impact leadership in adulthood. Yet, even though we expect these early years to be a particularly sensitive period of development, development continues to occur as individuals learn new behaviors and skills ([Bornstein, 1989](#)). Therefore, in the sections that follow, we will explore other developmental influences on leader development across the lifespan. We focus broadly on the two most time-consuming elements in children's lives: sports and education. Each of these has also been linked to leadership development. We add in practice to encompass all other types of leadership development opportunities in which one might engage. Although leadership in sports and education are both types of practice, one could also practice leading in church groups or social groups. Further, a focus on practice is consistent with models of leader development ([Day, 2000](#)).

2.3. Sports, education, and practice

2.3.1. Sports

Many of the lessons necessary for effective leadership are learned from organized sports. Children play on organized team sports as young as 4 years, but what are the specific outcomes associated with youth sports that transfer to leadership? [Larson \(2000\)](#) has argued that initiative is one of the most important aspects of development of youth. Initiative is also noted as a very important trait or personality characteristic for leaders as it is often equated with drive ([Bass & Bass, 2008](#); [Kirkpatrick & Locke, 1991](#)). [Larson, Hansen, and Moneta \(2006\)](#) looked specifically at the outcomes associated with youth sports and found that compared to other types of organized activities, children in youth sports programs showed significantly higher rates of initiative, emotional regulation, and teamwork experiences.

Research has highlighted the many other sports-related skills that are transferrable to leadership situations later in life including: visioning, intellectualizing, cultivating self-efficacy, focus on winning, being self-interested, being competitive, being task and ego-oriented, and cultivating and enjoying the flow experience (for a more detailed discussion of this research, see [Chelladurai, 2011](#)). Although parents likely influence the extent to which children are allowed to enter sports and the types of

sports that they play, the experiences that one has in athletics can affect one's development into a leader. For example, if a child was shy and had authoritative parents but was also athletically talented, that individual might be thrust into a leadership position at a young age, allowing him or her to learn valuable leadership skills from that role. Overzealous parents, and incompetent coaches, however, could interfere with the potential for positive leadership lessons learned from sports. As a result, participating in sports could either enhance or hurt leader development.

2.3.2. Education

Education is also expected to impact leader development at a young age. This can include leadership-specific education and general educational experiences. In terms of leadership-specific education, some studies have noted the impact of leader training at an early age on leadership outcomes (see [Matthews, 2004](#) for a review). More generally, school provides students with countless opportunities to practice their leadership. There are numerous clubs and organizations in which students can take part and assume leadership roles. Indeed, involvement in extracurricular activities, including athletics, predicts future leader development ([Bartone et al., 2007](#)). Students may also find themselves leading classroom discussions, working in small groups, and speaking in public. Indeed, even early researchers argued for the importance of teaching leadership as part of the general academic experience ([Brady, 1948](#)). In addition, [Mitra \(2006\)](#) suggests that students who attend school where they are empowered by school officials to share their voices are more likely to develop as leaders. Likewise, we would expect that mentoring relationships with teachers and faculty advisors should enhance future leadership development ([Ensher & Murphy, 2005](#)).

2.3.3. Practice

We include practice to encompass any other leadership roles through which young leaders might practice their leadership skills. Two recent books have highlighted the interplay between positive circumstances (e.g., socio-economic status) and practice on children's development. Many researchers study expertise and deliberate practice, but in particular work by [Ericsson, Krampe, and Tesch-Römer \(1993\)](#), motivated [Gladwell \(2008\)](#) to trace the lives of individuals such as Mozart, members of the Beatles, and Bill Gates, to make the case that 10,000 hours of practice at a particular task such as music or computer programming is necessary to become an expert on that task. [Geoff Colvin \(2008\)](#), a senior editor at Fortune Magazine, who wrote a book called *Talent is Overrated*, agrees. He argues, citing much of the same body of research, that to become extraordinarily skilled at something individuals must engage in countless hours of practice. He gives as evidence the story of a psychologist, Lazlo Polgar, who strongly believed that people became experts, they were not born experts. The psychologist therefore decided to run an experiment involving his three daughters and teaching them the game of chess beginning at age 4. All daughters excelled at chess. All became grand masters, the highest rank in chess, and one reached that milestone at the age of 15, a couple of months before the same milestone was reached by Bobby Fischer. Neither the father, nor his wife, had any skill in chess, but spent up to 3 hours a day training their daughters. Does this suggest that anyone who worked hard at chess could become a chess grand master? The author would argue yes, if the individual chose to put in the hours of practice. Children given the opportunity to practice their leadership skills at various points in their development undoubtedly become better at those skills than children who have little or no practice. [Mumford, Zaccaro, Harding, Jacobs, and Fleishman \(2000\)](#), who advocate a skill-based approach to understanding capabilities of organizational leaders, suggest that expertise is acquired in an orderly progressive fashion. These same ideas can be applied to thinking about childhood leader development and call for the systematic development of skills.

These early influences of sports, education, and practice suggest that although developmental trajectories are influenced by genetics, temperament, and parents, there are many additional ways to deviate from these trajectories through athletics, education, and practice. Therefore, there are many ways in which children can begin to think of themselves as leaders and learn to regulate and control their behavior to become effective leaders. In the next section, we will highlight the importance of the development of one's leadership identity and self-regulatory behavior on leadership outcomes.

3. Development of leadership identity and self-regulation

Most relevant to the lifespan approach of leader development is one's development of leadership identity and self-regulatory capabilities. Leadership identity is an essential requirement for leadership development to occur ([Day, Harrison & Halpin, 2009](#); [Lord & Hall, 2005](#)), and self-regulation is included given that it is a theoretically important component of leader development (e.g., [Gardner et al., 2005](#)). Moreover, both are among the most consistently cited outcomes of leadership development (e.g., [Gardner et al., 2005](#)) and have strong links to leadership effectiveness outcomes and engagement in future development activities ([Avolio & Hannah, 2008](#)).

Identities reflect one's conception of his or her individual characteristics and relation to larger categories or social groups ([Kihlstrom, Beer, & Klein, 2002](#)). Building on [Lord and Hall's work \(2005\)](#) [Komives, Longerbeam, Owen, Mainella, and Osteen \(2006\)](#) recently developed a developmental model of leadership identity in which they focus on the growth of one's leadership identity from an awareness that leaders exist to the awareness of and confidence in one's own leadership. Following [Komives et al. \(2006\)](#) model, or an alternative model, it is relevant to understand and explore the effects of different developmental trajectories on the development of one's leadership identity. We still lack an understanding of the impact of individual differences on *when* leaders develop a leadership identity or when they progress from one stage of identity to the next. Moreover, we still need to explore predictors of the type of identity that one forms; one might hold an identity as a charismatic leader or a servant leader.

We do know that conceptions of leadership do change over time. For example, children in 6th, 7th and 8th grade rate personality, dominance, popularity, and physical appearance as important to leadership (Lease et al., 2002). For adolescents, integrity, listening skills, and knowledge are rated as important leader characteristics, whereas compassion, consistency, and flexibility are rated as less unimportant (Morris, 1991). As such, leadership identities might also change to mirror those developmental changes in young persons' ideas of what it means to be a leader. For example, Komives et al. (2006) suggest that as young people's leadership identity develops, their conceptions of leadership shift from independent to interdependent, as they realize that effective leadership requires collaboration among leaders and followers.

Understanding differences in leadership identity also has implications for other leadership outcomes, given the impact of leadership identity on self-efficacy, motivation, and information processing (Day et al., 2009; Hannah, Woolfolk, & Lord, 2009), and has been highlighted by a number of leadership scholars as playing an important role in effective leadership (Hannah et al., 2008; Komives, 2011; Lord & Hall, 2005; Murphy, 2002). As mentioned earlier, self-regulation is the process by which persons are actively involved in regulating their activities toward a broad range of short-term and long-term goals (Baumeister & Vohs, 2003). Self-regulatory behavior also includes the self-management activities of goal setting, cognitive strategies of planning or rehearsing, or other activities to attain the goal, and monitoring of goal attainment, that are all important to motivation and leadership behavior and development (e.g., Carver & Scheier, 1981; Manz, 1986). Research suggests that leadership self-efficacy helps individuals enact the role of leadership especially under stressful or challenging situations and can impact follower outcomes, (see for example Hannah et al., 2008; Hoyt, Murphy, Halverson, & Watson, 2003; Murphy, 2002). Self-efficacy is also related to a person's motivation to lead (Chan & Drasgow, 2001). Without a desire or motivation to take the leadership role, it is unlikely that the leadership role will be pursued. Furthermore, research shows that currently active identities are important cues for accessing leadership skills which have been previously developed (Hannah et al., 2009).

4. Context matters

In the model, we propose that certain contextual factors (the developmental stage of the leader, societal expectations for leaders, and generational differences) impact the extent to which early experiences impact the development of a leadership identity and self-regulatory capabilities. Likewise, contextual factors moderate the extent to which one's identity and self-regulatory capabilities impact future leader development and leadership effectiveness. In the United States today, a young girl's early experiences might make her a highly motivated and self-efficacious leader. The same girl might not have had the same aspirations in the 1920s or if she were born in Afghanistan. Likewise, one's early influences might lead to a specific type of leadership identity, such as an identity as a task-master that is appropriate at an early age but not appropriate at a later age. We also acknowledge that these contextual factors likely interact with one another to influence leadership outcomes. For example, certain leadership behavior in older girls might be more acceptable than that same behavior in younger girls. But the interpretation of that behavior is influenced by society's expectations for girls, which change over time. We explain these moderating factors in the sections that follow.

4.1. Developmental stage

4.1.1. Sensitive periods

The extent to which experiences shape leader identity and self-regulatory capabilities is likely to differ depending on one's developmental stage (Fig. 1). In terms of creating identity, the analysis of leadership at different developmental levels suggests that there may be particular points in time at which introducing lessons is crucial to put individuals on the path to good leadership (cf. Gardner, 2011). Avolio and Vogelgesang (2011) make the analogy between leader development and learning a new language; it is possible to do both in adulthood, but is much easier to learn at a young age. Indeed, there is widespread evidence that sensitive periods exist in the development of humans and other animals (Bornstein, 1989 for a review). Bornstein (1989) argues that individuals are most sensitive to change early in life, or when their most rapid growth and change is occurring. Given the intense neural and hormonal development that occurs in early life, this point in time might be most sensitive to learning new skills and developmental capabilities. Although not previously applied to leader development, it is likely that the concept of a sensitive period in leader development does seem relevant.

4.1.2. Leadership changes with age

Second, what constitutes leadership evolves with age. As such, the types of leadership identities and self-regulation capabilities that result in effective leadership differ depending on one's developmental stage. It is useful, here, to delineate between the major developmental stages that occur in child development. There are four main developmental stages: *early childhood* which ranges from the end of infancy to ages 5–6, *middle and late childhood* which includes the elementary school years, *early and late adolescence* which include the teenage years, and *early adulthood* which may include the college years and early employment years (Santrock, 2010). Murphy (2011) provides a list of tasks associated with effective leadership at each stage (Table 1). She suggests that as tasks change, the skills and resources needed to enact effective leadership also change.

Individuals must have the requisite level of determination and self-control, an ability to grasp abstractions and social ideals, an awareness of others' personalities, and a sufficient memory span to pursue remote goals rather than immediate objectives, in order to engage in leadership tasks (Pigors, 1933). For those in pre-school, leadership mostly exists in persuasive and coercive behaviors (Barner-Berry, 1982). As a result, characteristics such as social dominance and pro-social/diplomatic behavior impact leader

Table 1
Leadership tasks and skills for youth*.
Source: [Murphy \(2011\)](#).

Age range	New leadership tasks and skills
Preschool years (ages 2–5)	<ul style="list-style-type: none"> ■ Influencing others ■ Getting others to like you ■ Communicating wishes ■ Increased need for emotional intelligence in interactions with others (reading the emotions of others, and delaying gratification)
Elementary school (ages 6–11)	<ul style="list-style-type: none"> ■ Coordinating others in teams ■ Early school leadership tasks (e.g., classroom monitor, or teacher's helper) ■ Fundraising (e.g., selling candy, etc.) ■ Public speaking to express ideas ■ Increased need for social intelligence in interactions with others (understanding social situations and acting appropriately)
Middle school–early adolescence (ages 12–14)	<ul style="list-style-type: none"> ■ Coordinating teams for fundraising or student projects ■ Self management (e.g., goal setting, self-observation & evaluation) ■ Serving in elected office and other student government activities ■ Public speaking as a leader to gain support for a cause
High school–late adolescence (ages 15–19)	<ul style="list-style-type: none"> ■ Organizing complex projects ■ Motivating team members ■ Organizational skills required by after school or summer jobs ■ Working with others to complete a work product in after school or summer jobs
College–young adulthood (ages 19–22)	<ul style="list-style-type: none"> ■ Establishing grassroots organizations ■ Complex supervisory skills required during internships ■ Serving as a leader with multiple constituents

The tasks important at an earlier age are still appropriate at older ages. The tasks listed for older ages are those more unique to that developmental stage.

emergence at a young age. Social dominance, here, refers to how children establish power in relationships with others and is usually demonstrated through negative acts ([Strayer & Strayer, 1980](#)). [Recchia \(2011\)](#) enrolled the help of pre-school teachers to identify the pre-school students whom they considered to be leaders, and then systematically studied how they differed from other students. Before beginning the research, she had pre-school teachers agree upon a definition of leadership, and cite specific behavioral examples of what types of strategies the children used in exercising leadership in the classroom. The findings of the research corroborated some of the early studies suggesting that social dominance and power are a precursor to leadership at a young age.

For example, young leaders developed social power for the purpose of developing relationships with teachers and influencing their peers ([Shin et al., 2004](#)). In another study, toddlers who were high in social dominance used both pro-social and coercive strategies to secure resources. Both strategies positively affected parents' ratings of social competence, but surprisingly coercive strategies were associated with positive peer regard ([Hawley, 2002](#)). Social competence, or the ability to form and maintain positive associations with others, is an important skill for leaders of all ages and includes negotiating and compromising ([Hartup, 1983](#)) and has been conceptualized as a balance between the goals of the self and forming social unions ([Edwards, 1994; Hawley, 2002](#)).

For children in elementary school, getting along with age mates is a very important skill ([Santrock, 2010](#)). For example, one study found that primary-school aged children become leaders to fulfill their wish of influencing others ([Mey, 1936](#) as cited in [Bass & Bass, 2008](#)). A unique study found that pre-adolescent students who were high in likeability, perceived popularity, and social dominance were seen as significantly more leader-like than students scoring low on the three dimensions ([Lease et al., 2002](#)). However, the most important tasks for early adolescents relate to achieving emotional independence from one's parents and achieving a masculine or feminine social role ([Santrock, 2010](#)). In high school, choices about college and vocations become salient ([Havighurst, 1972](#)). The types of leader behaviors from this group would be even more sophisticated as leaders begin to try on different leader identities in influencing their peers. Indeed, among high school students, a variety of attributes predict leadership outcomes, including personality, interests, motivation, behavior, self-rated skills, and academic ability ([Schneider et al., 1999](#)).

In sum, we argue that the extent to which early developmental experiences impact one's leadership identity and development of self-regulatory capabilities differs depending on when those experiences were encountered. Leading the lunch line might greatly enhance one's leadership identity in kindergarten, but be irrelevant in later years. Likewise, the specific leadership identities and self-regulatory capabilities that result in effective leadership are likely to change, depending on one's developmental stage.

4.2. Societal expectations

Societal expectations also impact the extent to which one's early influences positively relate to the development of a leadership identity and self-regulatory capabilities. Research on implicit leadership theories in adulthood highlight the fact that society dictates the characteristics that are perceived to be leader-like and those that are not ([Lord & Maher, 1993](#)). Implicit leadership theories are cognitive representations, or prototypes, for how leaders should look, act, and behave ([Lord & Maher, 1993](#)). Although expectations for leaders do differ between individuals ([Lord, Brown, Harvey, & Hall, 2001](#)) and can be shaped by one's membership in certain groups or organizations (e.g., [Hogg, 2006](#)), there is a strong societal bias that defines what leaders should be and do. As

such, most people (at least in Western Culture) hold relatively similar expectations for leaders (Epitropaki & Martin, 2004). However, if one were to enter into a different culture, one's behavior would likely be interpreted through the lens of that culture.

Likewise, as societies change, the same developmental experiences in youth might be more or less important to developing a leader identity. Social identity theory suggests that society's expectations not only impact how others perceive us, but also affect how individuals develop their own identity in relation to their group (Tajfel & Turner, 1986). Thus the same developmental experiences may not lead one to develop a leadership identity if society does not expect that individual to be a leader and, as a consequence, that individual does not expect himself or herself to be a leader. Although little research has examined the development of leadership identities in different races or social classes, there is some evidence that cultural identity can impact leadership identity (Arminio et al., 2000). For example, individuals from Asian and Hispanic cultures tend to hold more interdependent identities than individuals from more independent cultures, potentially impacting their leadership identities (Markus & Kitayama, 1991). Collectivistic individuals who live in an individualistic society may perceive the misfit between their developmental experiences, which might manifest as shared leadership in a group, and society's expectation for individualistic leaders.

There is much stronger evidence for the impact of society on the development of leadership among girls and women. In this instance, it is clear how societal expectations moderate the relationship between one's developmental experiences and one's leadership identity. Given that society hold different expectations for boys and girls, boys and girls learn to lead differently (Hoyt & Johnson, 2011). Whereas young boys interact with same-sex peers in an *enabling* style involving assertiveness, competition, and disagreement while girls develop *constricting* habits of interaction including turn taking and providing support (Lips, 2006). Moreover, different behavior leads to effective leadership for young boys and girls (Edwards, 1994; Maccoby, 1990; 1998). For example, girls who have strong social skills and social intelligence and whose classmates liked them are more likely to be seen as leaders, whereas these factors do not predict leadership for young boys (Kurdek & Lillie, 1985).

However, societal expectations interact with developmental stage and the behaviors that predict leadership success at a young age (i.e., communal behaviors) are insufficient to enact the agentic leader role in later years (Eagly & Carli, 2007; Eagly & Karau, 2002; Johnson, Murphy, Zewdie, & Reichard, 2008). This inconsistency can cause girls to lose their motivation and confidence to lead, and identity as a leader, because they perceive the disconnect between their behavior and society's expectations for leaders (Hoyt & Johnson, 2011). Moreover, society's expectations impact the extent to which certain behaviors are perceived as effective coming from men and women. As Johnson et al. (2008) demonstrated, when women are overly communal (lack agentic behavior), they can be perceived as un-leader-like but when they are overly-agentic (lack communal behavior) they can be perceived as un-woman-like. In either case, the outcome is detrimental to perceptions of female leaders' effectiveness.

4.3. Time in history

Societal expectations may be a specific reflection of the values of society at a given point in time, but we believe that time in history warrants mention on its own. Indeed, all leadership research is embedded in a specific point in time, which has the potential to impact what society expects in terms of the types of leader characteristics and behaviors expected by others (Bass & Bass, 2008; Day et al., 2009). Likewise, we expect that time will influence the types of experiences that are expected to give rise to leader development. For example, the increase in use of technology among today's youth might change the types of behaviors that are developmental. Although participation in athletics and social clubs might have been important developmental experiences for current leaders, the reliance of today's youth on social networking and online gaming may make these experiences obsolete.

For example, a recent article in *Harvard Business Review* touted the importance of multi-player on-line gaming in developing young people's sense of teamwork, mission accomplishment, and goal setting (Reeves, Malone, & O'Driscoll, 2008), while another found that gaming even improved decision making (Green, Pouget, & Bavelier, 2010). Because many children start playing video games quite early, the types and perhaps quantity of games played may dictate their leadership identities and eventual leadership styles. The way in which children and adolescents learn how to interact with one another is also affected by computer and mobile technology. Social networking, email, blogs, and instant messaging communication occurs at younger and younger ages, affecting communication preferences of young people that will affect their communication preferences later in life. The internet also affects the way in which all people, young people included, examine information. Likewise, the use of mobile devices for communication and searching the internet changes expectations about when and how communication should take place and knowledge should be acquired.

5. Implications of the lifespan approach and conclusions

There are additional implications of this approach which provide a forward looking lens to understanding leader development across the lifespan. A framework of leader development that delineates what is learned before one reaches adulthood can improve our understanding of leadership and leader development. It can help us to understand the relative influences of different factors on leader development. It can help us to target different types of development toward leaders who have taken different developmental trajectories. It can help us develop better leaders by beginning earlier in the developmental process. As a result, we argue that research is needed which explores the impact of early influences of leadership on later leadership outcomes. In addition, there are several particular aspects of the model that offer fruitful areas for future research, in addition to testing the general relationships between the early developmental factors included in this model (genetics, early influences, early experiences) on later leadership outcomes.

Further, we issue a call in the leadership literature to explore this lifespan approach in a variety of ways. First, additional research is needed to examine youth leadership. Specifically, researchers should seek to understand which developmental experiences shape young leaders' identities and self-regulatory capabilities at a young age. Second, more research is needed which examines the effects of early life experiences on adult leadership. This can be achieved with cross-sectional and retrospective surveys, but is most ideally studied using longitudinal data. Examining the relationship between individuals' attributes, experiences, and leadership development over time will enhance our understanding of the dynamic nature of leader development. For example, some characteristics such as social dominance may be predictive of leadership at a young age, whereas it may be maladaptive at an older age. Examining these relationships over time will allow us to better understand which attributes, if any, allow individuals to recognize and adapt their behavior to be more effective over time. Longitudinal approaches may help us to understand the mediating processes between early attributes (e.g., genetics, attachment style) and future leadership outcomes (Gottfried & Gottfried, 2011). It is possible that these relationships are mediated by the development of one's leadership identity, leadership self-efficacy, or goal orientation.

Further, additional aspects of the model that warrant attention are reciprocal relationships between leader identity (and self-regulation capabilities) with future leader development and effectiveness. Although this relationship has been implied and demonstrated in pieces (e.g., Hannah et al., 2008), no study to the authors' knowledge has actually demonstrated this relationship over time. Study of these phenomena could allow researchers to understand the actual long-term effects of engaging in leader development. That is, if engagement in development not only increases one's current skills but also encourages later engagement in development, the return on investment and effect size of leader development programs could be larger than previously thought (Avolio et al., 2009; Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009). Also of importance, here, would be the notion of how engagement in leader development creates a self-fulfilling prophecy of future leader development (Eden, 1993).

In addition, this paper makes note of a sensitive period in the development of leader development identity and self-regulatory capabilities (Bornstein, 1989). This is an important area for future researchers to consider. Using retrospective accounts or longitudinal studies, researchers could model the relative importance of early experiences compared to adult experiences. If there is a sensitive period in the development of leadership skills, this should be a call to schools and parents to ensure that children receive important development experiences at that time. It would also be useful to understand the individual differences that make these early experiences more or less important to future leadership effectiveness. Developmental psychologists, and others who research children, could offer valuable insights to study in this area.

Finally, we encourage future researchers to consider the effects of time and generational differences when studying leadership. Particularly when retrospective accounts are used, it is important to understand the time period in which one learned to be a leader. Societal expectations could also be studied to provide a greater understanding of why women and minorities experience barriers to leadership development (Eagly & Carli, 2007). Understanding how social expectations impact the development of leadership, and understanding who overcomes those expectations could allow us to equip young leaders for dealing with the challenges that they may face. We will note, there are obviously other groups that have societal biases against them as leaders. Factors such as race, socioeconomic status, or appearance might hinder one's development into a leader in the early years, potentially causing detrimental effects on leadership development in adulthood.

In summary, we encourage a multidisciplinary approach to understand leader development across the lifespan, in hopes of answering an enduring question: Are we doing a good job at early ages developing future generations of leaders? A call for research at younger ages to understand leadership, which focuses on longitudinal studies, and that incorporates more research on understanding development of leadership identity throughout the lifespan, provides the field with many benefits. Examining leader development across the lifespan allows us to consider a wider range of behaviors than are currently considered in research after early adulthood, a wider array of developmental techniques that may be effective with younger and older groups of developing leaders, and an increased understanding of the ongoing development of skills at different developmental stages throughout the lifespan. Taking a longitudinal perspective on examining these factors should also allow us to understand the relevant mediators and moderators of the relationship between early attributes and adult leadership outcomes.

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