Developmental networks at work: holding environments for leader development

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Abstract

Purpose – The purpose of this paper is to elaborate how an adult development perspective can further the understanding of developmental networks as holding environments for developing leaders confronted with challenging experiences.

Design/methodology/approach – The article utilizes constructive developmental theory (C-D theory) to explore and address the implications of an adult development lens for leader development, especially as they confront complex leadership challenges that trigger anxiety.

Findings – Theoretical propositions suggest different kinds of holding behaviors (e.g. confirmation, contradiction, and continuity) necessary for enabling growth and effectiveness for leaders located in different developmental orders.

Research limitations/implications – Propositions offered can guide future researchers to explore how leaders confronted with different kinds of leadership challenges sustain responsive developmental networks over time and how the developers in the leader's network coordinate to provide confirmation, contradiction, and continuity needed for leader development.

Practical implications – Leaders and their developers should reflect on how developmental orders may determine which types of holding behaviors are necessary for producing leader effectiveness amidst challenging leadership experiences. Organizations should provide assessment centers and appropriate training and development interventions to facilitate this reflection.

Social implications – This paper demonstrates the important role that developmental relationships play in leadership effectiveness and growth over time. Individuals and organizations are urged to attend to the quality and availability of high quality developmental relationships for purposes of continuous learning and development.

Originality/value – This article re-conceptualizes developmental networks as holding environments that can enable leader's growth as an adult and, hence, increase their effectiveness as leaders amidst complex leadership challenges.

Keywords Organizations, Leaders, Leadership, Career development, Developmental network, Holding environment, Adult development, Leader development

Paper type Research paper

Introduction

There is a prevailing sense that organizations and the world need more and better leaders. This need is comprehensive and spans the domains of business, public service,

education, and other areas of society (Day *et al.*, 2009). To understand why leadership is now such a valuable commodity, we must look at global trends including the rapid pace of change, the increased use of technology globalization, increasing workforce diversity, and the rise of multinational corporations which produces cross-cultural diversity (London, 2002). These trends are indicators of how complex leadership has become and myriad developmental challenges that individuals occupying leadership positions experience in organizations today. The term developmental challenge is a construct that encompasses task-related roles and responsibilities (e.g., unfamiliar tasks, more responsibility, working across boundaries, change, and influencing others) that developing leaders often find challenging (McCauley *et al.*, 1999, 1994; Ohlott, 2004). Our objective is to examine how leaders can surmount these challenging experiences and grow in their effectiveness to advance their careers.

We underscore the importance of challenging leadership experiences as "developmental triggers" and suggest that a comprehensive approach to addressing these challenges can be found in an adult development perspective on leader development (Avolio, 2005; Day *et al.*, 2009).

Given that the leaders of business and industry are adults, we propose that adult development and leader development are inextricably linked, and that developmental networks have the potential to serve as holding environments for facilitating a leader's growth throughout adulthood. By developmental networks, we mean a network of individuals actively involved in supporting the leader's career and identity development through providing developmental assistance (Dobrow and Higgins, 2005; Higgins and Kram, 2001). And, by holding environment, we mean a reliable environment where the leaders can feel safe to examine and interact with what their worlds present, even when they are anxious or temporarily need a secure base to which to retreat (Kahn, 2001; Winnicott, 1965).

The primary purpose of this paper is to explain how a focal leader, within the work context, will grow as an adult and hence, in their effectiveness as leaders if their feelings of insecurity and anxiety caused by challenging leadership experiences are grappled with and reconciled through coordinated developmental assistance provided by developers in his/her developmental network[1]. Recently, a study by DeRue and Wellman (2009) showed that when an experience presents leaders with demands that far exceed their current capacities, leaders get cognitively and emotionally anxious. We note here that becoming cognitively and emotionally anxious is not a condition solely restricted to the leadership job family. In fact, jobs with high demands and low control seem to be a hallmark characteristic of the clerical, administrative, and non-managerial/leadership job families (Bakker and Demerouti, 2007; Johnson and Hall, 1988). Taking note of the DeReu and Wellman finding with respect to leadership, we propose that the constructive-developmental (C-D) theory of adult development (e.g., Kegan, 1982, 1994; Torbert and Associates, 2004; Kohlberg, 1969) can aid understanding of how a leader's capacity as an adult will determine if an experience is perceived to be overwhelming and if the leader's developmental network can intervene to help him/her gain a perspective on those experiences that will enable effectiveness.

We begin with an integrative approach to leader development. First, we articulate the connections between adult development and leader development (e.g., Kegan, 1982; Kegan and Lahey, 2001; McCauley *et al.*, 2006) to demonstrate that in order to create conditions that foster leader development, we need to understand how the capacities

and limitations of leaders at each successive stage of adult development can explain why they find certain leadership experiences and activities demanding and sometimes overwhelming. Then, drawing on recent research on developmental networks (e.g., Dobrow Chandler *et al.*, 2011) and high-quality relationships (e.g., Carmeli *et al.*, 2009; Carmeli and Gittell, 2009), we delineate how a network of developmental relationships can serve as a holding environment that helps leaders to grow as adults, develop the capacity to perform in response to complex leadership challenges, and the ability to reconcile demanding leadership experiences.

Adult development and leader development

Since leaders are adults, it is obvious that their cognitive growth as adults will have implications for their leadership capacity. Some scholars (e.g., Day *et al.*, 2009; Ghosh *et al.*, 2010; Kegan and Lahey, 1984; Kuhnert and Lewis, 1987; McCauley *et al.*, 2006; Rooke and Torbert, 1998; Torbert and Associates, 2004; Valcea *et al.*, 2011) have highlighted this apparent connection between the two streams of literature. And, some studies have applied constructive-developmental (C-D) theory of adult development to explore this link empirically (e.g., Eigel and Kuhnert, 2005; Lewis *et al.*, 2005; Harris, 2005; Harris and Kuhnert, 2008; Spillett, 1995; Strang and Kuhnert, 2009; Van Velsor and Drath, 2004). Our interest in emphasizing this connection is to understand how the different orders of adult development as delineated by C-D theory can inform the coordinated effort of developers in creating holding environments for leaders experiencing anxiety in the face of complex leadership challenges.

Constructive-developmental (C-D) theory is built on the seminal work of Jean Piaget (1954). Kegan (1980) first coined the term "constructive-developmental" to recognize a stream of work in psychology that focuses on the growth and elaboration of a person's ways of understanding the self and the world. As noted by McCauley *et al.* (2006), an important distinction between this theory and theories of self-concept, i.e., an individual's self-identity (Epstein, 1973), social identity (Tajfel and Turner, 1985), or self-efficacy (Bandura, 1977), is that C-D theory is concerned with not just the content of the self, but the structures (i.e., if self is distinct or fused with others) that regulate the meaning of the self as an entity. This theory assumes that development is ongoing in which adults continue to develop qualitatively different meaning-making frames that enhance their understanding of self and others overtime. Each frame is more complex than the previous one in terms of including, differentiating, and integrating a more diverse range of experience (McCauley *et al.*, 2006). McCauley and colleagues integrate the work of different constructive-developmental theorists (e.g., Kegan, 1982; Torbert, 1987; Kohlberg, 1969) to note three broad successive orders of development that describe the range of different meaning-making frames that adults construct to understand self and others. These are:

- dependent order;
- independent order; and
- inter-independent order.

In the dependent order, adults define themselves through dependence on others (i.e., self lost in others). They are subject to socialized values and assumptions that they have internalized as their own (i.e., lack internal set of values that are independent of third party influence) and they depend on others whom they deem as important,

influential, inspirational, and accessible as their sources of internal confirmation, affirmation, and approval. Unlike dependent order adults, independent order adults can differentiate self from other. They hold self-generated values and standards that equip them with an independent perspective to examine and mediate between different ideologies held by others deemed as important. However, they are subject to their autonomous selves and are incapable of treating self-authored beliefs as objects of reflection. Finally, inter-independent order adults are neither subject to socialized or self-authored beliefs. They consider the self as transforming or a "work in progress" and are capable of treating their autonomous selves as objects that can be reflected on and changed for self-improvement purposes. As noted by McCauley *et al.* (2006), adults in inter-independent order know the value of mutual independence. "They can recognize what is self and what is other (i.e., self and other would be fully differentiated), so that the self and other can relate fully (become integrated, achieve true intimacy) without fusing (losing the self in others)" (Drath, 1990, p. 486).

Yet, how are these orders of development relevant for leaders? Extant studies (e.g., Harris and Kuhnert, 2008; Spillett, 1995; Strang and Kuhnert, 2009; Van Velsor and Drath, 2004) have answered this question to an extent by demonstrating that leaders in higher developmental orders (e.g., at least independent order) are more effective in leadership roles due to their capacity to respond to complex leadership demands. In this paper, we answer this question in two ways. First, we examine how a leader's developmental order can explain why they find certain leadership experiences and activities challenging and may, as a result, experience stress, anxiety, stagnation, and even failure if left in isolation. Second, we consider how a network of developers can collectively help leaders successfully navigate these leadership experiences and activities while simultaneously developing as adults. Since the majority of individuals occupying leadership positions in organizations are reported to be located in or in between the dependent and independent developmental orders with very few developing the capacity of an inter-independent order adult later in life (Kegan, 1994; McGowan *et al.*, 2007), we focus our discussion of challenging leadership experiences and requisite leader development for adults situated in the dependent, dependent-independent transition, and independent orders. Towards this end, we now present case scenarios of leadership experiences that adults in these developmental orders may find experientially challenging and the interpretation of those scenarios according to the constructive theory of adult development. These scenarios are drafted to model the challenges unique to leadership roles and responsibilities (McCauley *et al.*, 1994, 1999; Ohlott, 2004)[2]. Given the complexities of contemporary work organizations and the numerous occupational stressors that many employees including leaders face, we acknowledge that the challenge leadership scenarios we now present are by no means exhaustive nor are they solely subject to the interpretations we provide.

Envisioning leadership challenges for dependent order adults

Scenario 1: to be friend and/or leader in shouldering unfamiliar responsibilities: John's dilemma

John was recently promoted to project leader due to his stellar job performance. His new position in the information technology department is a step up the corporate ladder because he is now required to manage a group of people. John has a friendly disposition and has always been well perceived as an individual contributor and team player.

John is very excited about his new role but is also mindful that the team he now leads is a diverse workgroup of highly qualified professionals who are known throughout the organization for their passion and superior work products. Since his promotion, John has been looking forward to his new team's first project meeting with some anxiety and a large amount of enthusiasm; however, his enthusiasm was short lived.

For John, the project meeting was progressing nicely towards consensus when, unexpectedly, two members of his team had a passionate disagreement over one aspect of the project. This disagreement made John upset and conflicted. John was essentially torn between his disagreeable team members and dreaded having to make a decision that, would in effect, cause him to choose sides. John was concerned about being friends with all members of his team and having their respect. In light of these concerns, John chose to resolve the disagreement by taking a team vote even though he clearly preferred one team member's solution to the other. To worsen the situation the majority of the team chose John's least preferred solution and John lacked the courage to go against the will of the majority. John left his first project meeting feeling less enthused, conflicted and anxious.

Scenario 2: questioning cultural ideology in managing diversity: Shishir's dilemma
Shishir works for a multinational corporation and recently has been temporarily transferred to the company headquarters in Washington State from his Bangalore office to lead a special project. Shishir is an established and well respected leader in the Indian operation. Based on his past performance Shishir was looking forward to the new challenge of leading a multi-national team comprised of professionals from both India and the USA. Shishir's new leadership experience proved to be more challenging than anticipated.

During a routine bi-weekly update meeting with his multinational team, Shishir was challenged by Sruti, a junior Indian-American team member who expressed strong disagreement with his decision to move the project in a specific direction. Shishir was astounded by Sruti's action in the open meeting and experienced feelings of bewilderment and anger.

As a leader, Shishir is used to dealing with disagreements however; he never, in all of his experience, had been openly challenged by a younger competent Indian-American woman subordinate. In fact, throughout his career he never dared to openly challenge any of his seniors even if he disagreed with them as his culture and upbringing prepared him to think of such behavior as disrespectful. So, his Indian American junior's behavior troubled him to the extent that he started doubting himself as a leader. Not being able to figure out why he lost respect to his junior disturbed him most.

Both these scenarios show how dependence on others predisposes leaders in the dependent order to anxiety and turmoil in confronting leadership challenges. They are not aware of the strong influence that others (e.g., team members in case of John and cultural ideology in case of Shishir) have on their leadership behavior and hence, are incapable of regulating this influence. For John, the dilemma is about choosing the best idea at the expense of losing face with his team. He is conflicted between selecting his teammates' ideas because he does not want to appear as taking sides amongst members of his team. John's main concerns center around approval, mutual respect, and affiliation. His dependence on a shared sense of mutual respect and the need to be in the good graces of his valued others (team members) limits his decision making. He

feels torn by the conflicting expectations from his team members because he is subject to his loyalties towards them.

For Shishir, his unquestioned belief in cultural norms limits his capacity to objectively interpret his younger subordinate's behavior. Shishir seems to have internalized his socio-cultural norms to the extent that he is incapable of reflecting on the applicability of these norms in this particular context. Given that Sruti is also of Indian origin, he expects her to abide by certain Indian cultural norms and he interprets her lack of adherence to those norms as a sign of disrespect towards him. He considers this to be a personal failure and is disturbed over understanding how he failed her as a leader. In doing so, he not only exhibits blind allegiance to his culture, but he takes responsibility for Sruti's actions. He assumes that he is at fault as a leader instead of reflecting on how and why Sruti is responsible for her own behavior. For instance, the possibility that Sruti might have behaved in that manner out of her natural inclination instead of showing disrespect to Shishir's for his flawed leadership is beyond Shishir's comprehension because he is incapable of differentiating between his responsibility and what is responsibility of others. This shows how Shishir's efforts to relate to others results in his self being fused with others limiting his leadership capacity.

Envisioning leadership challenges for dependent-independent transition order adults

Scenario 3: lack of validation needed for managing high levels of responsibilities: Jennifer's dilemma

Jennifer was proud to be invited to the quarterly board meeting scheduled for the end of the month in lieu of her boss, the Director of Marketing. Jennifer is the Assistant Director of marketing for a medium-sized manufacturer of electrical engines. She has progressed smoothly in her career and much of it, she attributes to Tina, the head of the Operations Department. Jennifer considers Tina as her role model and seeks her guidance and counsel on making important decisions about work and career matters. Jennifer is acutely aware that very few women have attained senior leadership positions in the company and has admired the way Tina has successfully navigated the company's corporate culture that can be characterized as highly political.

The Director of the Marketing department, Jennifer's boss had been out on a sick leave for about a week but then became totally inaccessible at the crucial time when Jennifer needed him most to work out the figures and finalize a strategy for launching a new product. This disturbed Jennifer initially and caused her to have mixed feelings. Jennifer felt abandoned but she understood that this was an opportunity for her to step up her game and show that she could serve as leader of the Marketing department.

Jennifer worked diligently to finalize the figures and new product launch strategy. As always, Jennifer was anxiously looking forward to sharing her work with Tina, her role model prior to the board meeting. When she finally managed to get hold of Tina and shared her ideas, Jennifer was taken aback by Tina's ostensible negative reaction to her key strategies for the product launch. Although Tina liked her ideas, she did not agree with some of Jennifer's key strategies that required integration with the sales department. Jennifer listened to Tina and took detailed notes of the points Tina raised. She spent a lot of time pondering over Tina's arguments and knew that she had answers to them all. Jennifer concluded that for some reason, Tina was not seeing the big picture. This caused Jennifer to become upset. Knowing that Tina disagreed with

her undermined her confidence and she became unsure about presenting the plan to the board. Jennifer left the meeting with Tina feeling conflicted, bewildered and unsupported.

Scenario 4: attributing responsibility in leading across boundaries: Jim's dilemma
Jim leads a project management team whose work has been repeatedly held up by the finance department. The lack of cooperation by the finance manager has resulted in numerous complaints from Jim's team members who are unable move their projects to completion because of the lack of a concrete budget, and cost projections that are supposed to be developed in the finance department.

Jim, as team leader, has personally addressed this issue with the finance manager. However, nothing has changed and it seems as though the finance department is largely unresponsive to Jim and his team's needs. Jim is angered by this unresponsiveness. The message from the finance manager seems to be: My work is more important than yours; when I can make it I will, and when I can't that's just how it is! Clearly, the finance manager's attitude is holding up his team's work. But, then Jim is not sure if the explanation is that simple. It is evident that the finance manager is not delivering, but is Jim just a victim here or is he putting his team at the mercy of the finance department even though he knows that they are not dependable? Jim stays up late worrying about his project team as he is unsure which explanation makes more sense.

Both scenarios show how Jennifer and Jim seem to be stuck in addressing their leadership challenges because of two different ways of understanding the self and others. This is typical of leaders who are in transition between the dependent and the independent orders of development as one of the characteristics of the transitional space is to go back and forth between two different worlds of meaning making. In the case of Jennifer, she is clearly capable of addressing the arguments raised by Tina showing the independent order adult in her. This is also evident in Jennifer's performance in stepping up and creating the product launch plan in her boss's absence. However, at the same time, Jennifer still needs Tina's approval and affirmation and has trouble reconciling Tina's disapproval. This conflict shows her dependent manner of constructing the self where her confidence is clearly contingent on the need of an external authority (i.e., Tina) validating her growing self-authored ideas. She interprets Tina's disagreement as a personal failure by taking responsibility for Tina's actions, i.e., by making herself responsible for Tina not seeing the bigger picture. She assumes that something is wrong with her plan and doubts the merit of her ideas even though she can counter Tina's opposition. This again shows how Jennifer's efforts of relating to Tina (the other) results in the self being lost in others limiting her leadership capacity.

For Jim, he is disturbed as he is not clear if the issue of the finance department's tardiness can be explained by the finance manager's lack of respect towards his team's work or he has a hand in constructing it. His interpretation of the finance manager being responsible and he and his team being helpless victims in this whole situation shows his dependent manner of structuring the relationship between the self and the other. In doing so, he is not considering how he might be a party to constructing this misery for himself and his team. By passively blaming the finance manager, Jim is essentially attributing all responsibility (including the self's, i.e., his responsibility) to the finance manager (the other) showing that to some extent the self and other are still

fused in his efforts of relating to others. However, in reflecting on his role in placing his team in situations where the team's performance is solely contingent on timely work of the finance department, Jim demonstrates knowledge of his being an active party to what he is experiencing (i.e., the capacity of an independent order adult in differentiating self's responsibility from other's). Nonetheless, ultimately his dilemma to accept this alternate explanation over blaming the finance manager shows how he mostly still structures the relationship between self and other from a dependent order of meaning making.

Envisioning leadership challenges for independent order adults
Scenario 5: lack of interpersonal closeness in managing subordinate's performance problem: Courtney's dilemma
Courtney is known as a leader with integrity and honesty. She is also viewed as tough but fair and has garnered tremendous respect throughout the organization. Many of the women in the organization aspire to be like Courtney because they perceive her as having it all. Courtney is married, has two children and is highly active in several community-based organizations.

Juliana, a valued and high-performing member of Courtney's team had been failing to meet deadlines for some time and Courtney decided to approach Juliana to discuss her performance in a one-on-one meeting. In the meeting Courtney noticed how distraught Juliana was and offered her some water. Cupping the glass of water, Juliana broke into tears and shared that recurring disagreements with her husband, about household chores and the rearing of their toddler son was beginning to erode their relationship and this was affecting her performance at work. Juliana then said in a voice of resignation, I wonder how you are able to do it all!

Courtney averted her eyes from Juliana and stated in a matter of fact manner, that she was sorry to see Juliana in such distress. She advised Juliana to seek support from friends and family and suggested that Juliana should regularly communicate her progress on each project so that Courtney knows ahead of time if Juliana is likely to miss a deadline due to her personal challenges. The phone rang in Courtney's office and the brief meeting ended. Juliana quickly thanked Courtney for her time and left Courtney's office with an odd feeling of surprise at Courtney's seemingly cold reaction.

As Juliana closed the office door, Courtney ignored the ringing phone and had a moment of pause to reflect on what just happened. In reflecting, Courtney wondered if she was cold and distant to Juliana. This was not the first time Courtney had been perceived to be distant by her team members. It is not that Courtney does not empathize with her employees. But, like in case of Juliana, she holds back from sharing how she would feel in similar situations as most of the times she is pretty certain that she would feel differently. When Juliana asked how Courtney would react, Courtney was tempted to say that she would speak up and refuse to be treated unfairly instead of feeling upset and hurt. But, she thought that saying so would be like her ignoring how and why Juliana was feeling hurt. So, she stopped herself.

In closing her moment of pause, Courtney wondered if holding back and not sharing her feelings has helped her as a leader. Although she does not regard interpersonal closeness important for managing her subordinates' performance, she cannot help but notice that her distant interactions may be lowering the engagement of her subordinates at work.

Scenario 6: changing self-authored beliefs for leading across boundaries: Mark's dilemma
Mark prides himself as a turn-around specialist and has worked very hard to become the vice president of Manufacturing for an established manufacturer of after-market automotive parts. During his five-year tenure as vice president of Manufacturing, Mark has managed to turn-around and strengthen his company's position by personally leading initiatives that created operating efficiencies, through cost take-outs and a renewed focus on quality. Recently, Mark began working with Jason, his new assistant vice president of Manufacturing, whom Mark played a role in hiring.

Although Mark had initially thought of Jason as a great addition to his team, lately he has become dissatisfied with Jason's leadership style. Mark has observed how Jason interacts with subordinates, direct reports and production workers. Jason is relaxed, informal and comes across as too candid. Jason's ability as a man of the people is evident in his popularity on the shop floor however; it runs counter to Mark's formal, aloof and stand-offish style.

In an effort to ease his growing dissatisfaction, Mark took Jason to lunch and essentially told him that his interactions with subordinates and others on the shop floor might undermine his authority as a leader. Listening to what Mark had to say left Jason astonished. Jason shared that he disagreed with Mark's view that leaders need to maintain hierarchical distance for asserting authority. He then stated that he interacts with others based on what feels natural to him. Jason further stated that as long as the work gets done there is no harm, no foul.

At the end of lunch, Jason could not help feeling disappointed in Mark's seeming rigidity. He now views Mark as Mr Authority who works with a close-door policy. Perhaps this is why Mark has earned the reputation of being a strong but "unapproachable" leader.

Mark has always been aware of his "unapproachable" image, however; he was upset about Jason's attitude, not his image. He had expected Jason to be more mature and to conduct himself according to his leadership position. Deep within, Mark wonders if he made the right decision to hire Jason.

In both cases, the leaders (Courtney and Mark) have an independent self that is clearly differentiated from others (Juliana and Jason). For, Courtney, the capacity to differentiate herself from others helps her to maintain good relationships but also hold her employees accountable. Her "tough but fair" reputation speaks to her ability to be objective and make leadership decisions that might temporarily jeopardize her positive image to others. Pleasing everyone or seeking everyone's approval is not important to her. Similarly, Mark is not bothered by how he is perceived by others and like Courtney he has a distinct autonomous identity which is not subject to validation by others. However, both seem to be also limited by their autonomous selves which generate their self-authored belief systems, especially when relating with others.

For Courtney, strong identification with her beliefs of how to be helpful stops her from sharing her personal challenges with Juliana. For instance, Courtney has no issues with having a different take on the situation from that of Juliana. Like that of a dependent order leader, she does not feel that staying with her own point of view would involve some kind of a loss of her relatedness with Juliana. But, she seems to have a whole frame of reference on how to be helpful (e.g., she thinks that sharing her thoughts on why she would not feel hurt in Juliana's situation would be like her

ignoring how and why Juliana was hurt) and responding to Juliana's question would violate her "theory" of how to be helpful. So, she holds back from sharing her views on the matter and misses the opportunity to motivate her team members to improve performance by developing interpersonal closeness with them.

For Mark, we see that he is strongly identified with his self-authored beliefs about a hierarchical culture which limits him from seeing the benefits of candid interactions with juniors. He does not blindly follow the organizational hierarchy nor does he doubt himself as a leader due to John's disagreement like that of a dependent order adult. He draws his "theory' of why it is important to maintain hierarchical distance from prior experience and gets upset if others fail to act according to the principles of his theory. Thus, there seems to be no space between the self-authored belief/theory/frame of reference and the leader in the independent order. This lack of space between their beliefs and themselves limits their objectivity in regards to questioning their self-authored beliefs and makes them anxious when others do not respond well to their beliefs.

These case examples illustrate how one's developmental position shapes the challenges that leaders face in the dependent, dependent-independent transition, and independent orders. It is important to note here that while it might be too simplistic to assume that the developmental position would be constant in shaping challenges across all domains and contexts of a leader's life, if a leader has developed the capacity of a higher order adult (i.e., independent order or higher), the leader's self will attempt to seek coherence in understanding challenging experiences in different contexts according to the principles of the higher order even if it might not succeed at all times (Kegan, 1994; Kegan and Lahey, 2001). So, if due to particular circumstances in a challenging situation (e.g. responding to a directive or authoritarian supervisor) a leader in an independent order falls back to operating from a dependent order of meaning making, the leader would be aware of the inconsistency in his/her meaning making and would strive to behave consistent with the higher order in future interactions.

Table I gives a summary of the limitations contributing to leadership challenges for leaders in the dependent, dependent-independent transition, and independent orders. Now that we have an understanding of the kind of experiences that leaders in these orders are likely to find challenging, the following sections will explain how developmental networks comprised of multiple developers can act as holding environments for leaders confronted with these challenges.

Developmental networks as holding environments

Drawing on social network theory, Higgins and Kram (2001) re-conceptualized mentoring as a network of "developers" that offer varying degrees of career support, psychosocial support, and role modeling. Recently, in reviewing the extant research on developmental networks, Dobrow *et al.* (2011) proposed four fundamental attributes of these networks:

(1) the network should have multiple developers;

(2) developers included should be taking an active interest in advancing protégé's career;

(3) developers should come from a broad range of social spheres, i.e., inside and outside of the protégé's organization, different hierarchical levels, and from a

Developmental order	Limitations contributing to leadership challenges	Holding behaviors in developmental network
Dependent	Adherence to self-authored beliefs, inability to regulate third-party's influence on decisions and actions. "Self" is lost in "others"	Confirmation: developers sharing new approaches of addressing the challenging experience at hand with the leader Contradiction: developers encouraging the leader to reconcile different perspectives on the leader's challenging experiences Continuity: developers coordinating to both share new approaches and encourage the leader to reflect and develop his/her own perspective on challenging experiences
Dependent-independent transition	Going back and forth between two different ways of understanding leadership experiences concerning themselves and others, i.e., "self" is only to some extent differentiated from "others", lacking confidence in growing self-authored voice, needing validation from third-party	Confirmation: validating leader's self-authored ideas on challenging experiences Contradiction: testing if without validation from the developers, the leader can act on self-authored ideas to address challenging experiences Continuity: developers coordinating to both provide validation and to encourage the leader to develop confidence in his/her independent perspectives in absence of validation from others
Independent	Adherence to self-authored beliefs, inability to reflect on how self-authored beliefs can be limiting their objectivity as leaders. "self" is incapable of relating to "others" in a mutually independent manner	Confirmation: respecting the leader's rationale for self-authored beliefs relating to his/her challenging experiences Contradiction: encouraging the leader to consider perspectives that are different and at times in conflict with his/her self-authored beliefs to address challenging experiences Contradiction: developers encouraging the leader to reconcile different perspectives on the leader's challenging experiences Continuity: developers coordinating to both share new approaches and encourage the leader to reflect and develop his/her own perspective on challenging experiences Continuity: developers coordinating to both respect the leader's beliefs and to expose the leader to perspectives that contradict his/her self-authored beliefs

Table I.

wide range of domains beyond work that includes friends, family, and
community members; and

(4) developers can provide varying amounts of career and psychosocial support,
i.e., not all will provide high amounts of both types of support.

Here we suggest that to serve as holding environments for the career development of
leaders confronted with challenging experiences, developmental networks need to have
three additional attributes:

(1) developers should be at higher developmental orders than that of the focal
leader because having transcended similar limitations, developers at higher
orders can offer insights on overcoming the limitations experienced by the focal
leader (Chandler and Kram, 2004);

(2) developers should practice relational coordination in terms of shared goals,
shared knowledge, and mutual respect because without relational coordination,
multiple developers in the leader's network might end up acting at
cross-purposes adding to the anxiety of the leaders (Gittell, 2002, 2003); and

(3) developers should have high-quality relationships with the focal leader
characterized by emotional carrying capacity (i.e., allowing display of a range of
emotions), tensility (i.e., flexibility to withstand stress and bounce back),
connectivity (i.e., openness of the tie to new information), positive regard (i.e.,
being respected), and mutuality (i.e., shared learning) because without
high-quality relationships, anxious leaders can create psychological defenses
that prevent them from seeking or being receptive to other's support and
become emotionally isolated (Carmeli *et al.*, 2009; Dutton and Heaphy, 2003;
Kahn and Kram, 1994).

In saying so, we acknowledge three important considerations. First, while it is
desirable for developers to be at higher developmental orders for having greater
insights on leadership challenges, it is possible that the leader by virtue of being in a
lower developmental order might misunderstand the developer's perception of what
leaders should do when faced with certain kinds of challenges (Harris and Kuhnert,
2008). Whether the developer and the leader overcome possible misunderstandings will
depend on their desire to be proactive in communicating the gaps in their perceptions
of leadership, and their efforts to develop a high-quality relationship with each other.

Second, since a leader's network might be made up of individuals who do not
necessarily know each other (Higgins and Kram, 2001), the likelihood of developers
practicing relational coordination will depend on the leader's desire to share the kind of
support that he/she receives from different developers so that each developer can
accordingly decide how to complement the support that the leader is receiving from
others in his/her network. In the main, relational coordination is mostly contingent on a
leader's level of relational competence and the intentional sharing of the kinds of
developmental assistance and support he/she receives from other developers in the
network. Without purposeful sharing by the leader, relational coordination among
developers is possible but not probable.

Third, for developing high-quality relationships with the focal leader, the
developers should be aware that the focal leader is still carrying out his/her leadership
role while interacting with the developers and hence, their efforts to provide a holding

environment should be informed by and embedded in the leader's dynamic context. In other words, developers in the leader's network should make efforts to understand how the changing circumstances in the leader's work environment might alter the nature and demands of current challenges experienced by the leader. In doing so, they are more likely to be able to effectively respond in a manner that fosters learning and development.

A leader's developmental network with the three additional attributes noted above can account for more variability than a primary mentor in providing three types of holding behaviors needed for leaders confronted with challenging experiences: empathic acknowledgement, enabling perspective, and containment (Higgins and Thomas, 2001; Kahn, 1993; Shapiro and Carr, 1991). To empathically acknowledge the anxiety of the leader confronted with a challenging experience, the developers will explore the leader's experience, identify with and validate his/her experience as a source of insight. To enable the leader's perspective, the developers will use self-reflection to negotiate interpretations of anxiety-arousing experiences. And, for containment, the developers will make themselves accessible while actively inquiring into the leader's experience and receiving the leader's anxiety with compassion. These three behaviors are comparable to the three dimensions (e.g., confirmation, contradiction, and continuity) of a holding environment posited by Kegan (1982).

As noted by McGowan *et al.* (2007), confirmation provides a sense of safety that is required for recognizing and affirming the evolutionary growth of an adult; contradiction provides challenges that cause letting go of a stationary balance and drives an adult to view the world differently; and, continuity provides steadfastness that establishes stability amidst periods of change. Multiple developers in a leader's network can build a confirming environment through engaging in empathic acknowledgement of the leader's challenging experience, a contradicting environment through enabling the leader to develop a perspective on their challenges, and a continuing environment through containing the leaders in a constant and dependable space where they can access their developers when needed. The following sections will refer to the case scenarios presented earlier to explain how multiple developers in a leader's developmental network can collectively contribute towards these three dimensions of a holding environment and how the three dimensions would manifest in different ways for leaders in different orders of development.

Holding environment for dependent order leader

Developers operating from higher orders of development in the leader's network will be adept at building greater self-awareness in the dependent order leader about a third party's (e.g., team members, colleagues, organization, culture, society, or family) influence on the leader's decisions and actions. But, first they need to create an empathic context by accepting and affirming the leader's socialized way of meaning making. This will make the leader feel valued and lay the groundwork for him/her to make efforts towards interpreting the challenges they are experiencing more objectively (Kahn, 2001). To accept the leader's unique experiences of the situations, developers need to listen to the leader's interpretation of the challenge and acknowledge that they had experienced similar challenges. Further, as the leaders in the dependent order expect "the mentor to be an authority in his or her field, providing instruction, definitions of reality, performance assessment, and expert guidance" (McGowan *et al.*, 2007, p. 407), developers

need to provide more direct assistance by sharing how they had dealt with those challenges. Specifically, stories on how the developers approached challenges involving disagreements between/with valued others (e.g., team members, colleagues, seniors, or juniors) as experienced by John in Scenario 1, and incompatibilities resulting from adherence to any third-party beliefs (e.g., society, culture, organization) as experienced by Shishir in Scenario 2 can help. By sharing new approaches of addressing similar challenging experiences, the developers can build a confirming environment that helps the dependent order leader feel safe and validated.

P1. A dependent order leader will experience confirmation when higher-order developers in the leader's network share new approaches of addressing the challenging experience at hand.

However, confirmation alone is not sufficient for the dependent order leader to grow into an adult capable of developing an independent perspective to address this challenge. Although the leader feels safe because he/she has access to a repertoire of strategies offered by the developers addressing his/her challenging experiences, he/she lacks the capacity of independently constructing actionable interpretations of those experiences based on critical thinking (Kahn, 2001). Contradiction is needed simultaneously to help the leader critically reflect on the strategies made available by the developers without resorting blindly to any approach (McGowan *et al.*, 2007). Developers in the leader's network can contradict the dependent order leader's third-order of consciousness by encouraging the leader to negotiate between different perspectives offered by them (i.e., to negotiate interpretation of anxiety arousing experiences). In doing so, they will contradict the leader's inclination of agreeing with any of the views (i.e., dependence on the third party) without objectively reflecting on how the leader can develop his/her own perspective that is informed by multiple views.

P2. A dependent order leader will experience contradiction when higher-order developers in the leader's network encourage the leader to reconcile different perspectives on the leader's challenging experiences.

For the developmental network to provide continuity, developers in the leader's network need to coordinate how they can balance confirmation and contradiction so that the dependent order leader perceives his/her developmental network to be a steadfast source of support. This coordination can be enabled and facilitated by the leader's effort to share with each developer, the kind of support that he/she receives from others so that each developer can accordingly decide how to better coordinate their support with others in the leader's network. Without any coordination, it is possible that the leader might find two of his/her developers working at cross-purposes i.e., developers disagreeing on how a dependent order leader should be supported to address a challenging experience. For example, without coordination, one developer might believe that sharing new approaches of addressing challenging experiences at hand (i.e., confirmation) should suffice while another may think that the leader should be asked to reflect and develop his/her own perspective (i.e., contradiction) without much direct assistance. However, neither confirmation nor contradiction alone constitutes a holding environment. Thus, such lack of synergy in developers' efforts can be disturbing and break the continuity of holding that the leader needs to address a challenging experience. Coordination in terms of shared goals and knowledge about

how their support fits relative to other support provided to the leader can help to build mutual respect among the developers for the roles that each of them plays towards helping the leader identify and address his/her dependent order of meaning making (i.e., fusing "self" with "other") as a primary factor contributing to challenging experiences with team members, colleagues, juniors, or seniors (Gittell, 2003):

   P3.   A dependent order leader will experience continuity when the leader enables higher-order developers in his/her network to coordinate and create a constant space for the leader to become aware of how his/her dependence on third party contributes to leadership challenges.

Holding environment for dependent-independent transition order leader

Developers operating from higher orders of development in the leader's network can make the dependent-independent transition order leader aware about how they are subject to a third party's (i.e., other's) influence in spite of their capacity for developing self-authored perspectives. Although the independent structure of understanding the "self" and the "other" is functional in these adults, to some extent, they still have remnants of the dependent order adult in them and as a result, they go back and forth between two different ways of understanding leadership experiences concerning themselves and others (e.g., team members, colleagues, seniors, juniors, etc.). For confirmation, developers in the leader's network need to empathize by acknowledging the leader's dilemma of understanding the world in two different ways (i.e., dependent and independent frames) and advocate that the leader interpret the challenge through the lens of an independent order adult. For instance, in Scenarios 3 and 4, developers can give Jennifer the confidence she is lacking in her self-authored plan by affirming her ideas and can help Jim see the value of considering the role he is playing in repeating his team's misery by confirming that Jim is not a helpless victim in this situation. Leaders in this transitional order are externally authorized to be internally authorizing (Kegan, 1982) and hence, will choose to exercise their self-authored voice as leaders only if they can find some support for their emerging voices from a third party authority:

   P4.   A dependent-independent transition order leader will experience confirmation when higher-order developers in the leader's network validate the leader's self-authored ideas regarding the challenging experiences they are addressing.

However, confirmation alone is not sufficient for the dependent-independent transition order leader to grow into an adult who is comfortable exercising their self-authored voice without any third party confirmation. For contradiction, developers in the leader's network need to push the leader to act on their self-authored ideas in absence of validation from any third party authority. Developers can do so by exposing the leader in this transition stage to assignments that replicate the leadership experiences that they typically find challenging. Further, they need to at times disagree with the leader's self-authored views to test if the leaders are growing capacities to act from their self-authored perspective when important "others" disagree with them. The experience of exercising his/her independent self repeatedly in such challenging assignments can give these leaders the confidence they lack in their self-authored voices (McGowan *et al.*, 2007).

P5. A dependent-independent transition order leader will experience contradiction if he/she acts on self-authored ideas to address a challenging experience even when higher-order developers disagree with his/her idea.

Finally, for continuity, the dependent-independent transition order leader needs to share with each developer the kind of support that he/she receives from others so that the developers in the leader's network can coordinate how they can balance between validating the leader's growing self-authored views and disagreeing with his/her views to achieve the shared goal of helping the leader build confidence in his/her independent perspective. Without a shared understanding of whether the leader feels safe enough to survive the challenge of the developers disagreeing with him/her, the developers in the leader's network will fail to create a continuous holding space (Gittell, 2003). The leader needs to enable the developers in his/her network to work as a team to validate his/her need for authentication from a third party and build his/her awareness about how he/she is limited by this need. That will result in the leader feeling both accepted and at the same time supported to build capacity for self-regulated thought and action to address his/her challenging experiences:

P6. A dependent-independent transition order leader will experience continuity when the leader enables higher-order developers in his/her network to coordinate and create a constant space for the leader to become aware of how his/her inclination to get a third party validation of self-authored ideas contributes to leadership challenges.

Holding environment for independent order leader
Developers operating from higher orders of development in the leader's network can make the independent order leaders aware about how their self-authored views define their boundaries and can limit their leadership. However, this awareness is possible only when the developers respect the efficacy of a leader's own "way" (McGowan *et al.*, 2007). So, for confirmation, the developers in the leader's network need to acknowledge their individuality by inquiring about their unique experiences that are at the foundation of their self-authored beliefs (Kahn, 2001). For instance, in scenario 5 Courtney must have had some experiences that led her to develop her "theory" of how to be helpful. Same is true for Mark in scenario 6, whose prior experience has led him to believe why it is important to maintain hierarchical distance. Developers in the leader's network need to positively regard and appreciate an independent order leader's reasons for supporting their self-authored beliefs so that they can feel understood (Kahn, 2001).

P7. An independent order leader will experience confirmation when higher-order developers in the leader's network acknowledge and understand the leader's rationale for self-authored beliefs relating to his/her challenging experiences.

For contradiction, developers in the leader's network need to challenge an independent order leader's adherence to self-authored beliefs that the leader considers unquestionable. Developers can do so by sharing examples of their experiences that contradict the leader's rationale for their beliefs. They can push the independent order leader to experiment with going against their beliefs in low risk situations so that the leader starts seeing the value in contemplating alternative perspectives beyond their

singular ideologies (McGowan *et al.*, 2007). Further, they can encourage the leaders in this stage to engage in action learning to address their challenging experiences. Action learning is a dynamic process that involves a small group of people focused on thinking in new and fresh ways about real life organizational problems and the reality in which the problems are situated (Marquardt, 2000; Marsick and O'Neill, 1999). By encouraging the independent order leader to discuss his/her leadership challenges with his/her other colleagues (preferably a diverse group), the developers can cause the leader to practice critical reflection which can reframe his/her self-authored views and mental frameworks used in decision making:

P8.   An independent order leader will experience contradiction when higher-order developers in the leader's network encourage the leader to consider perspectives that are different and at times in conflict with his/her self-authored beliefs relating to challenging experiences.

Lastly, for continuity, the independent order leader needs to share with each developer the kind of support that he/she receives from other developers. This purposeful sharing by the leader enables developers in the leader's network to coordinate the balance between showing respect for the independent order leader's rationale for self-authored beliefs and encouraging the leader to see the value in perspectives that disagree with his/her self-authored beliefs. Coordination and a shared understanding among an independent order leader's developers will help the leader to feel appreciated and prompt the leader to reflect on the limitations of his/her views. Unless the developers share a goal of first understanding the foundation behind the leader's views and then encouraging the leader to reflect on the limitations of his/her views, they might end up infringing upon the leader's self-authoring independence (Chandler and Kram, 2004):

P9.   An independent order leader will experience *continuity* when the leader enables higher-order developers in his/her network to coordinate and create a constant space for the leader to become aware of how their rigid adherence to self-authored ideas contributes to their leadership challenges.

Discussion
This paper broadens the domains of developmental network and leadership research by connecting the theoretical lenses of adult and leader development. Its unique contribution is the delineation of how developmental networks can act as holding environments for both leader and adult development. Given the importance of leaders in today's complex organizational contexts and myriad challenges that leaders experience, an essential element of leader development is the recognition that leaders must unfurl as adults in order to lead effectively. Consequently, we used constructive development theory of adult development as an explanatory base for developmental networks acting as holding environments for leaders in the dependent, dependent-independent transition, and independent orders of adult development. Although we did not focus on the inter-independent order in discussing challenging leadership experiences and requisite leader development, we delineated how the developers who have some capacity of the inter-independent order (i.e., developers in higher order than the independent order leader) would contribute to developing independent order leaders confronted with challenging experiences. Our theoretical integration yielded nine propositions concerning the variability in three kinds of

holding environment behaviors (e.g., confirmation, contradiction, and continuity) that developers in the leader's network can provide to help leaders in different developmental orders grow as they attempt to interpret and address their challenging experiences. These propositions define a new agenda for research that promises to contribute to both theory and practice.

Implications for research
Empirical research stemming from the propositions offered in this paper can help to illuminate the internal processes that occur for the focal leader's career growth as well as the relationship dynamics that unfold between the focal leader and developers in his/her developmental network. Given the complexities of the process of leader's growth in a holding environment, initial research exploring the propositions should be qualitative. Perhaps, longitudinal studies employing in-depth qualitative interviews can enable us to discern how leaders confronted with different kinds of leadership challenges sustain over time, responsive developmental networks that provide confirmation, contradiction, and continuity needed for leader development (Langley, 1999).

Scholars can also apply narrative and visual mapping strategies in case study research to generate and organize rich contextual data about each kind of leadership challenge incident where developers in a leader's network coordinate to influence a leader's growth as an adult (Eisenhardt, 1989; Langley, 1999). If each leader is taken as a unit of analysis or a case, applying a within-case analysis technique will provide familiarity with each leader's process of development as a stand-alone entity and identify unique patterns (Eisenhardt, 1989). Identification of unique patterns will guide cross-case comparisons that will involve looking at the data in many divergent ways. For instance, researchers can select pairs of cases to compare leaders who differ in terms of their developmental orders (e.g., comparing a dependent order to an independent order leader) and leaders who are similar in their developmental orders (e.g., comparing two leaders in dependent order). This combination of leaders at different and similar developmental orders will lead to more sophisticated understanding of how development networks facilitate growth of leaders who are grappling with complex challenges (Eisenhardt, 1989).

Future researchers can also explore factors that may undermine or reinforce the potential of developmental networks to serve as holding environments for developing leaders. Our propositions on leader development hinge on the assumption that a network of developers at higher developmental order than the focal leader will produce leader growth and development. Implicit in this assumption is the requirement that all developers would be subject to some form of coordination in the service of efficient and effective leader support. Also implicit in this assumption is that the leader is developable as evidenced by the leader's receptivity to the triggers provided by each developer in their network. Although this may be true from a theoretical perspective, a pragmatic perspective on the prevailing work environment would suggest consideration of the factors (e.g., age, race, gender, personality, mentor willingness and commitment, interpersonal competence, protégé's developmental proactivity, learning goal orientation, organizational context) that enhance and/or hinder developmental relationships between the leader and developers (Chandler *et al.*, 2011).

For example, if the organizational context surrounding a developmental network is characterized by a highly competitive culture, developers within the same organization

will be unlikely to coordinate their efforts to develop a particular focal leader; their relationships with one another (if they happen to know each other) are likely to be strained by conditions of low trust and infrequent communication, rather than high quality interactions (Dutton and Ragins, 2007). In contrast, in an organizational context characterized by a developmental culture (Hall, 2002; Parker *et al.*, 2008), each developer irrespective of whether they know each other may be more inclined to respond to the leader's efforts of sharing information about how others in his/her network are supporting him/her and coordinate their efforts with others in the leader's network to foster growth in the leader. And, if a developmental network spans several organizations, these subcultures will distinctly influence the extent to which developers are able to coordinate their efforts to foster leader growth.

A similar array of possibilities may be identified in propositions regarding the impact of antecedents related to the focal leader and each developer's individual characteristics (see Higgins and Kram, 2001; Ragins and Kram, 2007). More complex analytic tools would be required to discern the relative impact of these factors on the quality of relationships among the developers and with the focal leader (Stephens *et al.*, 2011). These are plausible next steps to advance theory and research in this area.

Implications for practice

The theoretical integration of adult and leader development as delineated in this paper has practical implications for organizations and their leaders who seek career development. Our six brief case scenarios illuminated the range of leadership challenges that regularly occur in organizational settings that can either immobilize the focal leader or serve as a trigger for the leader's development. In each instance a responsive developmental network is an important factor in determining whether the leader will stagnate in his/her traditional responses or be willing and able to grow as adults capable of trying new behaviors that would lead to more effectiveness. Given the pressing need for well-prepared leaders in all domains of business, industry, and society, organizations must acquire a multidimensional and transcendent view of leadership where they come to recognize leader development as inextricably linked to adult development (Day *et al.*, 2009; Laske, 2002).

This recognition does not mean a move away from competency-based leadership training; rather, it means that developmental experiences such as mentoring, and in particular, developmental networks should be included in the organization's overall leader/leadership development strategy. By doing so individuals are ensured the opportunity to better understand how their own developmental positions and their network of higher order developers can shape their approach to leadership. In the case of program design for high-potential leaders, this is likely to accelerate participant's learning and development and more effectively prepare them for leadership challenges they will face.

We believe that the coupling of developmental networks with the notion of developmental initiation (Higgins *et al.*, 2007) presents an opportunity for organizations to play a role in ensuring that their leaders gain awareness of the potential of developmental networks as holding environments. Developmental initiation refers to development-seeking behaviors on the part of focal leaders to build a network of developers who help to enhance the leader's personal learning, skills, knowledge, and or task/performance (Higgins *et al.*, 2007). While developmental

initiation may often be self-directed, organizations can facilitate a growing leader's initiative to build a responsive network of developers who will provide a protective space (holding environment) for the leader to safely examine challenging experiences even when he/she is anxious. Human Resource Development (HRD) professionals can do so by supplementing formal mentoring efforts in high potential and talent development programs with education and training on the different types of holding behaviors (e.g., confirmation, contradiction, and continuity) that leaders may need when faced with complex leadership challenges.

Further, educational seminars disseminating information on the different orders of adult development (e.g., dependent, independent, and inter-independent) and assessment centers[3] estimating a leader's developmental order using Torbert and Associates's (2004) Leadership Development Profile (LDP) or Kegan's (1994) Subject-Object Interview (SOI) methods are needed. These seminars and assessment centers can help growing leaders assess whether their limitations of adhering to third-party or self-authored beliefs are contributing to their leadership challenges, and to identify the kind of holding behaviors they need from their developers to become better leaders. Similarly, in these contexts leaders have the opportunity to uncover basic assumptions and competing commitments that undermine their effectiveness in meeting current challenges (Kegan and Lahey, 2001). We see examples that are based on a constructivist-development paradigm emerging at Leadership Institutes based in university settings, as well as at the Center for Creative Leadership and at the Gestalt International Study Center.

These seminars should not be only restricted to growing leaders. Potential developers should be encouraged to learn about the value of holding behaviors in helping leaders grow as adults. Knowledge of different kinds of holding behaviors needed for different leadership challenges as described by the propositions offered in this paper coupled with an opportunity to participate in assessment centers estimating adult developmental orders can help the developers self-evaluate if they have the capacity required to enact certain holding behaviors. This introspection will help these individuals decide if they should positively respond to a leader's request of joining his/her developmental network when the leader explains the kind of leadership experiences he/she finds challenging.

In addition, developers should be encouraged to learn about the importance of building high-quality relationships as high-quality relations can enable them and the leader to overcome possible misunderstandings they might develop by virtue of being located in different developmental orders (Dutton and Heaphy, 2003). Also, developers need to understand the value of coordination in building effective holding environments for anxious leaders (Gittell, 2003). Training for potential developers of leaders should emphasize the need for all developers in a leader's network to practice relational coordination by establishing some shared goals, knowledge, and mutual respect concerning how they can support the leader's growth when the leader is confronted with challenges. The developers in a leader's network need not know each other to practice such coordination. As delineated in the propositions, the leader can facilitate this coordination by sharing with each developer in their network how others in his/her network are supporting him/her to address a challenging experience.

Leaders' relational competence (i.e. developmental initiation and relational savvy) will enable them to play a central role in proactively managing their networks in order

to leverage and fully benefit from the collective efforts of their developers (Higgins *et al.*, 2007). As managing effective coordination among diverse developers might add to the strain of an already anxious leader confronted with challenging experiences, it is imperative for HRD professionals to train leaders to become relationally competent. Alternatively, developers in a leader's network can be empowered to elect their own coordinator to complement the leader's efforts to manage the coordination. However, this would be only possible in case of high potential and talent development programs where all developers in the leader's network are from the leader's organization instead of being from different social spheres in the leader's life (e.g., friends, family, and community members).

These practices will have the greatest impact when embedded in a culture that rewards various efforts to support leadership development (Hall, 2002; Parker *et al.*, 2008). Therefore, in addition to implementing education and training, it will be critical to examine whether rewards and recognition include acknowledgement and celebration of those who take the time to develop talent for the organization. If senior decision-makers visibly model such behavior, managers down the line will be more inclined to embrace the development of potential leaders as a central part of their work, thus enhancing the likelihood that focal leaders will be able to create and sustain responsive developmental networks (Kram and Higgins, 2009).

Conclusion

In sum, we conclude that there will be challenges for organizations and individuals attempting to structure and sustain developmental networks that can act as holding environments for supporting leaders to grow and advance in their careers. Further, scholars and researchers will encounter methodological challenges in testing the propositions outlined. Despite the challenges, we believe that we have taken a preliminary step in producing new integrative insights on leader development and the promise and significance of this work outweighs the difficulties likely to be encountered. Thus, we urge moving forward with research designs that test these propositions because they will add to our understanding of how to leverage the potential of developmental networks as holding environments in growing the much needed leadership capability in contemporary organizations.

Notes

1. We use the term "developer" to include a variety of relationships that actively support individuals' development. As Haggard *et al.* (2011)noted, there are more than 40 different definitions used since 1980 to describe helping relationships that provide some aspects of traditional mentoring relationships as originally defined by Kram (1983). We make the assumption that "developmental relationships" (relationships between developers and focal leaders) are high quality connections characterized by mutuality, reciprocity, high emotional carrying capacity, and connectivity (Dutton and Heaphy, 2003; Dutton and Ragins, 2007; Stephens *et al.*, 2011).

2. The scenarios are composites of individuals that the authors have encountered in teaching, consulting, and research work in this area. The names noted are arbitrary.

3. Assessment centers are characterized by standardized, group-oriented, and other testing activities that provide a basis for judging and predicting human behaviors believed to be germane to work performed in organizational settings. The assessment center was pioneered

by Dr Douglas Bray in 1956 at the American Telephone and Telegraph Company (Finkle, 1976). Most managerial assessment centers use multiple assessment techniques however; the typical ones are situational exercise (in-basket), objective tests, projective tests and interviewing. Many contemporary organizations use assessment centers and several meta-analyses have proven their efficacy (Gaugler *et al.*, 1987; Arthur *et al.*, 2003). We believe that Kegan's Subject-Object Interview method and Torbert's Leadership Development Profile could be used in the assessment center context.

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