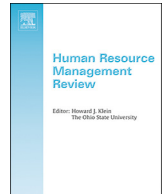




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Creating comprehensive leadership pipelines: Applying the real options approach to organizational leadership development

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ABSTRACT

Typically, firms consider leadership development (i.e., training focused on skills required for success in leadership roles) and succession planning (i.e., the creation and implementation of long-term plans that address changes in top leadership roles) as two distinct organizational initiatives. In recent years, however, scholars and practitioners have called for a new, more comprehensive approach that considers the organization as a system. Rather than considering succession planning and leadership development as distinctly different initiatives, organizations should work to create internal leadership pipelines that span entry-level employees to executives. To leverage potential advantages associated with instituting comprehensive leadership pipelines and to address practical concerns associated with risk and talent management, we propose the introduction of incremental investment in organization-wide leadership development programs via distinct, evaluative stages – a real options reasoning (ROR) approach to leadership. We argue that blending ROR with skills-based leadership models diversifies risk associated with investments in talent management and increases the ability for targeted, purposeful investment in potential organizational leaders.

The Zenger/Folkman database, which includes information about approximately 17,000 participants who took part in leadership development training, reports that on average employees spend approximately 10 years in assigned leadership roles before undergoing immersive leadership training. This undervaluation of leadership skills development is problematic for a number of reasons. First, although the Zenger/Folkman database does not specify a reason why organizations wait for nearly a decade to train organizational leaders, common wisdom would suggest a preference for trainees with extensive experience, as such trainees may be viewed as more dedicated and a safer investment. However, Hunter (1980) has long stood in contrast to this myth, finding that neither age, education, nor experience were particularly useful for predicting training proficiency. Instead, training on tasks that individuals will complete as part of a future role is more useful (Hunter & Hunter, 1984). Second, employees thrust into managerial roles without the proper training may develop suboptimal habits and settle into a leadership style that may not be beneficial for managing and motivating employees (Zenger, 2012). Training with such individuals may need to take on the challenge of changing or eliminating the poor habits and styles developed in lieu of appropriate leadership training. Third, employees have reported that the availability of professional development opportunities is a critical factor in assessing their continuance at and advancement within an organization (Anderson, Baur, Griffith, & Buckley, 2017). In short, employees may be less willing to invest in a company that is not

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willing to invest in them. However, the same argument may be approached from the firm's perspective. Many firms avoid extensive, resource intensive leadership development programs due to high levels of uncertainty and risk. From a strategic perspective, firms do not wish to heavily invest in developing employees who may seek out opportunities elsewhere, thereby eroding the internal labor market (Chen, Chang, & Yeh, 2004).

While scholars and practitioners have considered and encouraged the concept of comprehensive leadership pipelines (CLPs), to date, a guiding framework for putting such a system in place does not yet exist, theoretically, empirically, or in practice. Informed by macro and micro organizational perspectives, our CLP framework answers the call for tailoring training priorities to maximize leadership potential across levels (Conger & Fulmer, 2003; Groves, 2007), thereby increasing the quality of the internal labor pool – a necessity for effective succession planning (Barney, 1991; Beltrán-Martín, Roca-Puig, Escrig-Tena, & Bou-Llusar, 2008). Further, rather than seeking to identify and train individuals in disjointed programs, such as rising stars for manager trainee positions at entry and then, discretely for executive succession at the top levels, we posit that organizations should consider staffing needs across the organizational hierarchy and target and train distinct leadership needs for each level. As will be discussed in the following sections, given the need for cross-level analysis, training, evaluation, and coordination, CLPs are resource intensive. As such, in this paper, we also consider the competing, core needs of employees and firms, and, to address concerns, suggest incremental investment in employees across the organization in multiple, discrete stages of performance evaluation – a real options reasoning approach (ROR; Folta & Miller, 2002; Lee, Peng, & Barney, 2007; McGrath, 1999) to organizational leadership training that creates more fluid, organization-wide succession planning.

1. Organizational leadership development

1.1. Succession planning

Organizational leaders must frequently decide whether to “make or buy” human capital (Barney, 1991) when evaluating whether to recruit external candidates who already possess the requisite skills or to provide internal training for skills that employees lack (Cappelli, 2008). Internal hires offer several benefits as they are generally more likely to be committed and perceived as a better fit while being less costly (Bidwell, 2011). Also, as leaders determine the focus of employees' attention (Barnett, 2008), hiring external leaders will alter attention patterns (Ocasio, 1997) and create different mindsets (Hambrick & Mason, 1984) while internal succession offers more consistency. For these reasons, in some circumstances, hiring from within an organization can be more advantageous.

In addition to being a necessity for effective succession planning (i.e., a process through which key personnel are replaced in a controlled way that allows the operations of the business to continue uninterrupted; Martin, Martin, & Mabbett, 2002; Lewis & Heckman, 2006), implementing programs or policies that lead to the development of a high-quality internal talent pool are beneficial for the organization in a variety of ways, including decreased turnover and increased engagement and job satisfaction (Chen et al., 2004). However, in order to create a stronger, larger internal labor pool, the following HR-specific questions must be addressed: (1) What skill sets should be developed and when should they be developed to optimally grow the internal labor market throughout the organization? and (2) How can organizations effectively utilize their training efforts to select employees who will be successful in *future* roles? Drawing from established leadership and development theory and empirical cross-disciplinary research helps address these key questions.

The process of succession planning is time intensive and requires a great deal of long-term planning (Kesner & Sebor, 1994; Rothwell, 2010), and there is some debate regarding how far into the managerial hierarchy organizations should dive to find what have been deemed high-potential employees. From a strategic perspective, it may be less risky and more efficient to create a plan for advancement with employees who have already substantially advanced through the company given that fewer contingencies stand between their current role and replacing a key employee. It is for this reason that succession planning has traditionally begun with middle managers (Conger & Fulmer, 2003). However, more comprehensive views highlight the importance of considering how the various organizational systems interact (Kast & Rosenzweig, 1974) and support extending succession planning beyond its traditional scope to create a coherent process throughout the levels of the organization. For instance, policies that strengthen the internal labor market, including the expansion of training programs and alterations in reward systems to award skill or knowledge acquisition (Church, Rotolo, Ginther, & Levine, 2015; Leskiw & Singh, 2007) prior to middle management are essential in developing the skills employees need for executive roles (Ferratt, Agarwal, Brown, & Moore, 2005; Foong-ming, 2008).

However, organizations have been more hesitant to invest in developing lower-level employees who may leave the organization (Chen et al., 2004; Cordero, Ditomasso, & Farris, 1994; Ferratt et al., 2005) despite developmental opportunities being among the most important factors that employees consider when determining their long-term career plans (Anderson et al., 2017; Foong-ming, 2008; Martin & Schmidt, 2010; Valcour, 2014). Further, organizations that invest in leadership development programs do see a demonstrable positive return in terms of effectiveness and performance across *all* levels of leadership (Avolio, Avey, & Quisenberry, 2010). Therefore, it appears to be in the interest of the firm to invest more resources into leadership and professional development to create a CLP that could provide growth and strengthen the internal labor market, thereby increasing employee flexibility (Beltrán-Martín et al., 2008) and competitive advantage (Ferris, Hochwarter, Buckley, Harrell-Cook, & Frink, 1999). In doing so, firms would create a pipeline that not only feeds high-quality talent upward but also serves the various skill-based needs throughout all levels of the organization (Winiarska-Januszewicz & Winiarski, 2014).

Table 1
Critical leadership skills_a by organizational level.

Supervisory leaders	Middle managers	Executive leaders
<ul style="list-style-type: none"> ● Technical (Katz, 1955) ● Knowledge (Mumford et al., 2000) ● Business (Mumford et al., 2007) ● Human (Katz, 1955) ● Social Judgment (Mumford et al., 2000) ● Interpersonal (Mumford et al., 2007) 	<ul style="list-style-type: none"> ● Human (Katz, 1955) ● Social Judgment (Mumford et al., 2000) ● Interpersonal (Mumford et al., 2007) 	<ul style="list-style-type: none"> ● Conceptual (Katz, 1955) ● Problem solving (Mumford et al., 2000) ● Strategic (Mumford et al., 2007) ● Human (Katz, 1955)

^a As per Katz, 1955; Mumford et al., 2000; Mumford et al., 2007.

1.2. Leadership skills

It has been suggested that employees are often promoted based on the skills they use in current roles as opposed to the skills they will need in future roles (Lazear, 2004; Peter & Hull, 1969). Recent empirical work (Benson, Li, & Shue, 2018) suggests that, indeed, employees are promoted as the Peter Principle (Peter & Hull, 1969) suggests. Such promotions are both costly and create a sub-optimal internal talent pool (Benson et al., 2018) and may put organizations at risk - especially those with a large divide between the skills used by entry-level employees and those in leadership roles. For instance, customer service representatives may find that the skills needed to be successful in an entry-level role (e.g., interpersonal skills and emotion management) translate well to team leader or managerial roles. However, entry-level employees who rely on a high degree of technical knowledge and skills to be successful may have a more difficult time adapting to a more person-focused leadership role. Indeed, despite being exceptionally technically qualified, engineers appear to struggle while transitioning to leadership positions because they are simply unaware of the scope and requirements of the role (Chang, 2005). Such problems may exist for other employees in similar highly technical and specialized careers such as architects, doctors, or accountants.

Katz's (1955) model of leadership skills calls for proficiency within three distinct skill sets that vary in importance by organizational level – technical skills, human skills, and conceptual skills. This model has been reinforced and expanded through modern leadership research (See Table 1). First, Mumford, Zaccaro, Harding, Jacobs, and Fleishman (2000) maintained that the major competencies needed for leaders include problem-solving skills (e.g., long-term forecasting), social judgment skills (e.g., social skills), and knowledge (e.g., domain-specific technical skills), which largely overlap with Katz's original framework. The Leadership Skills Strataplex (Mumford et al., 2000) also draws from Katz's work and includes cognitive skills (e.g., ability to learn), interpersonal skills (e.g., social perceptiveness), business skills (e.g., managing personnel or material resources), and strategic skills (e.g., planning) as essential organizational leadership skill sets (Mumford, Campion, & Morgeson, 2007). Mumford et al. (2000, 2007), like Katz (1955), noted that the relative importance of some skills versus others varies based on the level of the leader within the organization due to the need to accomplish differing tasks and address more complex problems.

The latter work provides support for the skill sets needed for organizational leaders as set forth by Katz (1955), such that the social judgment skills and interpersonal skills align with human skills, knowledge and business skills align with technical skills, and problem-solving and strategic skills align with conceptual skills. Katz (1955) originally envisioned these skill sets as strictly managerial in nature, but there is evidence that they also apply to emergent leadership roles (Mumford et al., 2007), making them ideal as a guiding framework for organization-wide leadership development. On the whole, Katz's skills-based model, bolstered by future iterations of leadership skills models, presents a widely applicable framework of trainable skills that takes into consideration the distinct needs of leaders at various organizational levels.

1.3. Real options reasoning and leadership training

For more than two decades, strategy and entrepreneurship researchers have adopted ROR for strategic decision making. Generally, real options reasoning (ROR) has been applied for forecasting and decision making purposes in uncertain circumstances e.g., growth options, joint ventures, governance, and research and development, among others; Chi, 2000; Folta, 1998; Folta & Miller, 2002; Kester, 1984; Kogut, 1991; Kumaraswamy, 1996; McGrath & Nerkar, 2004; Paxson, 2001; Tong, Reuer, & Peng, 2008). As such, integrating ROR into CLPs is especially attractive given competing employee-employer interests with respect to professional development (e.g., desire for development (Foong-ming, 2008; Martin & Schmidt, 2010) v. cost and perceived risk (Chen et al., 2004; Cordero et al., 1994; Ferratt et al., 2005). ROR considers that resources are scarce and, therefore, would dictate the development of the skills pertinent for only the next level of leadership advancement within the organizational hierarchy rather than investing in blanket leadership skills training, which aligns with Katz's (1955) position-based recommendations. By doing so, organizations would invest fewer training resources into each employee but still be able to make additional, incremental investments as warranted. The employees, therefore, become the options in which the organization is investing. In short, by considering leadership development from an ROR perspective, the concern for failed return on investment in leadership development is mitigated and employee-specific risk is diversified.

As conceived, the primary advantage of options is that they allow for a small upfront investment and an opportunity, but not requirement, to invest more at a later time when uncertainty has decreased (Fama & Miller, 1972). As adapted from the finance literature, options focus on the advantages of subsequent rounds of funding rather than fully investing in projects from the onset.

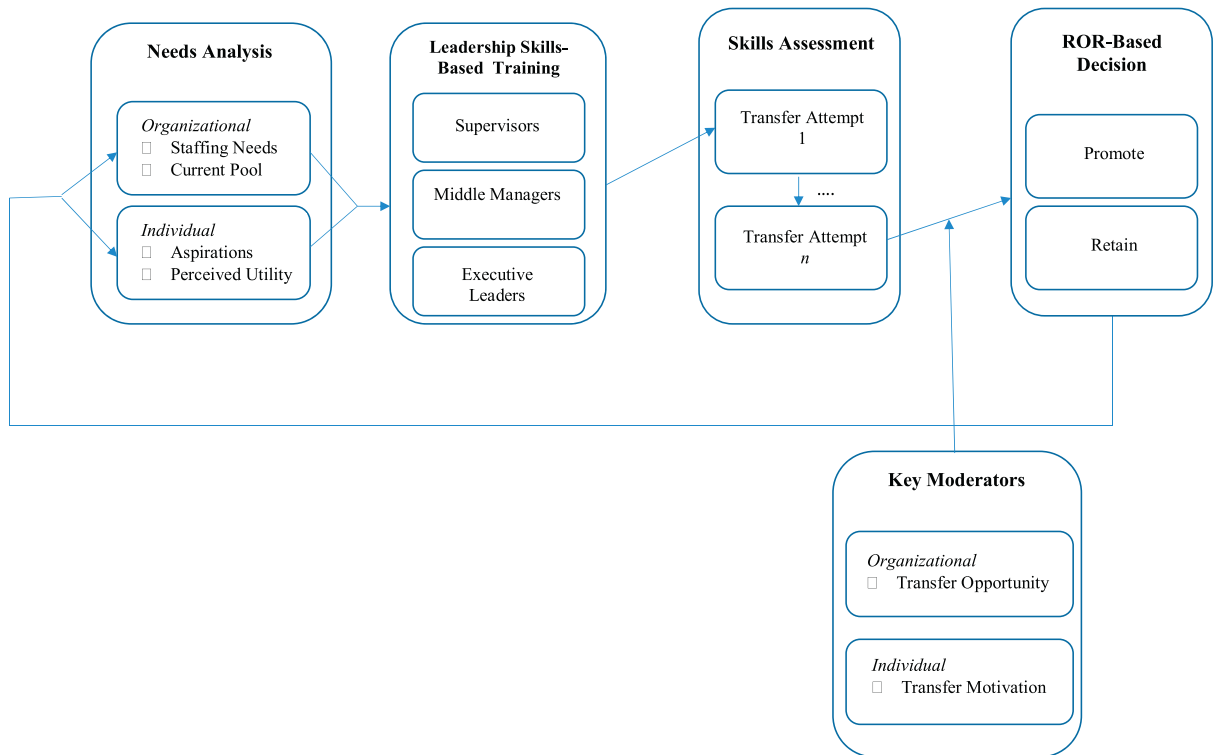


Fig. 1. Real Options Reasoning Approach to Comprehensive Leadership Pipelines.

Through the use of sequential stages of evaluation, additional information is learned and uncertainty is reduced (McGrath, 1997). Using ROR, organizations can accept a greater number of new ventures or explore more new opportunities and diversify the risk across opportunities. As a result, ROR represents a paradigmatic shift (Merton, 1998) in the study of decision making, especially in high-risk circumstances (McGrath, Ferrier, & Mendelow, 2004).

By abandoning failing options or those “out of the money” at each evaluation period, their cost is less than had the organization invested completely in the project and equals only the upfront expenditure less any remaining value (Dixit & Pindyck, 1994; Roberts & Weitzman, 1981). At the same time, options that show promise, or those “in the money,” receive additional funding during the next stage of resource allocation. In as much, by increasing the variance of risk in the options held by an organization, the mean value of the options is increased (McGrath, 1999; Mitchell & Hamilton, 1988) as long as rigorous discernment is made to reduce the downside by abandoning unfavorable options (McGrath, 1997; McGrath & Nerkar, 2004). Counter to traditional perspectives, then, ROR holds that investments should be made *even if* they have a high likelihood of failure at some point in the future (Lynn, Morone, & Paulson, 1997).

At the heart of real options is the desire to capture economic rents, which are excess returns that are not easily copied by competitors (Alchian, 1991). In this way, option-taking is a form of creating a competitive advantage. One way that organizations can capture such rents is through the development of their human capital. In regards to leader succession planning, an ROR approach to skill development can provide informative insight into current practices – at which level leadership training should begin and what skill sets should be taught. Specifically, ROR would suggest that leadership training should take place at every level in the organization and focus on the skills most pertinent for their immediate needs. Further, it would suggest incremental investments in training and development resources provided across a wider range of employees in order to provide an unlimited upside potential while mitigating the downside risks. Given the benefits of incorporating the concept of options into organizational leadership training, in Fig. 1, we propose an iterative, theoretical model of CLP that includes four distinct phases – needs analysis, skills-based training, skills assessment, and ROR-based decision making – along with key organization- and individual-level moderators that may influence the success of leadership skills application post training. For the remainder of the manuscript, we explicate the various phases of the model and provide propositions for future research along with discussion and considerations for implementation of an ROR-based CLP framework.

2. Exploring the CLP model

2.1. Overview

The roots of the CLP Model are grounded in the basics of training and development – needs analysis, targeted training content,

training evaluation, and training transfer (for a comprehensive review, see [Tannenbaum & Yukl, 1992](#)). As such, there are numerous factors in these areas to which firms should attend. Due to the extensive research in these areas, in order to best structure our discussion, we focus exclusively on the factors that may be most relevant or impactful for the development of CLPs.

2.2. Needs analysis

In the course of developing and deploying a training initiative, needs analysis is a crucial first step (e.g., [Goldstein & Ford, 2002](#)). During this phase, information relevant for meeting the core goals of training, including gaps in knowledge, skills, and abilities is gathered; groups of employees that should be targeted for training are determined; and the presence of managerial and organizational support that is linked to how well training will transfer on the job is analyzed ([Brown, 2005](#); [Burke & Hutchins, 2007](#)). While the typical guidelines for needs analysis also apply to CLPs, there are additional factors that must be examined to determine which employees are eligible for training and whether the training will be valuable to the employee and the firm. [Collins and Holton's \(2004\)](#) meta-analysis on leadership training effectiveness confirms this recommendation, noting that a key determinant of leadership development success lies in conducting a thorough needs analysis from both organizational and individual perspectives before training begins.

2.3. Organizational needs analysis

All training initiatives should begin with the needs of the organization in mind ([Tannenbaum & Yukl, 1992](#)). In this case, organizations should reflect on their current HR structure, resources, and strategy to develop a clear plan for who can and should be trained. It may be important to take stock of current policies that dictate selection decisions and consider which changes (e.g., promotion criteria, decision-making authority, career planning, etc.) may be needed for CLPs to be successful. Given that one of the core goals of this training initiative is to increase the firm's ability to place employees in the right place at the right time, the logical first step to assessing the need for training is to analyze the current internal talent pool in order to forecast both short- and long-term staffing needs. This is noted here because, over time, the focus of human resources has shifted to executive strategy and operational HR policies ([Ferris et al., 1999](#); [Marchington, 2015](#); [Marchington & Wilkinson, 2005](#)) and surrendered what were once core HR functions (e.g., career development) to front-line managers ([Purcell & Hutchinson, 2007](#)) who have little decision-making authority insofar as long-term planning is concerned. As a result, long-term leadership development, including training focused on skills required for success in leadership roles ([Mumford et al., 2007](#)) has taken a back seat relative to upper-level succession planning. Given the historical trends, there may generally be a larger need for leadership skills training at lower levels of the organization and less need for leadership skills training among gatekeeper roles ([Kesner & Sebora, 1994](#)), but knowledge of like contingencies would be beneficial for funding appropriations and solidifying returns on investment.

The path to building a high-quality CLP that strengthens the internal labor pool will differ from firm to firm, so it is, again, vital that a thorough, customized examination of current and future staffing needs be undertaken. Further in this regard, [Katz's \(1955\)](#) skills model provides a starting point for leadership skills training, but firms may need to supplement development programs with skills not considered in Katz's model but that are unique to the organization or critical to success in a 21st century workforce, such as technology and computer literacy skills ([Bassellier, Reich, & Benbasat, 2001](#)). With this in mind, we propose the following:

Proposition 1. Comparing long- and short-term staffing needs to current internal labor pools will better inform selection of the appropriate employees for skills-based leadership training.

2.4. Individual needs analysis

While organizational needs vis-à-vis staffing may be a starting point for needs analysis, they are by no means the end point. Indeed, training efforts are likely to be foiled should the trainees be uninterested or unwilling to engage in and/or apply leadership skills training. To avoid this, two key characters of employees should be analyzed before offering development opportunities to employees – career aspirations and perceptions of training utility.

Career aspirations have long been associated with seeking opportunities to advance in one's life. Decades of research has established the desire to attain a particular career goal or role as an antecedent to seeking educational and vocational training (e.g., [Ashby & Schoon, 2010](#); [Schoon, 2001](#); [Schoon & Parsons, 2002](#)). Likewise, within organizations, motivation to learn new skills has been associated with pursuing development opportunities. Specifically, managerial aspirations are predictive of the pursuit of training and development opportunities on route to career advancement ([Tharenou, 1997, 2001](#)). With respect to CLPs, then, employees who are seeking professional development opportunities for the purposes of career advancement may be most apt to gain and apply valuable skills from leadership training.

Aspirant organizational leaders, however, are not the only employees who would benefit from leadership skills training. To many employees, professional development is an end in itself. Those who enjoy their current role and have no desire to advance may still appreciate skill acquisition and increased task variety. For instance, [Campion, Cheraskin, and Stevens \(1994\)](#) reported that job rotation, although not immediately relevant for advancement purposes, was useful as a means for employees to acquire new skills. Indeed, as long as training is viewed as beneficial for one's job, employees are likely to learn the skills being trained and make efforts to apply them after training is complete ([Grossman & Salas, 2011](#)). Therefore, allowing employees who perceive training as utilitarian to participate in leadership skills training may offer a larger return on investment simply as a function of the trainee applying their

newfound leadership skills in a more proximal way (e.g., taking the lead on a project, being a proactive follower). ROR approaches to investments mirror this perspective.

It is worth noting that not all employees will fall into one of these two camps. For instance, employees who have reached a successful career plateau are unlikely to find benefit in training resources because they are effective, satisfied, and challenged in their current role and have not sought or received a promotion in quite some time (Ettington, 1998). Generally, successful career plateaus, as defined above, more often occur later in an employee's tenure, but it may also be the case that less senior employees content with their current work arrangements would forgo professional training and development when they perceive a large gap between the work they currently perform (and enjoy) and a future role for which training would prepare them (Garvin, 2013). Bearing this in mind, we propose the following:

Proposition 2. Assessing employees' career aspirations of advancement and positive perceptions of training utility will better inform selection of the appropriate employees for skills-based leadership training.

2.5. Skills-based leadership training

In his seminal piece on leadership skills, Katz (1955) considered three distinct levels of management – top, middle, and low or supervisory – as well as three broad types of skills – technical, human, and conceptual skills. Technical skills refer to domain-specific technical knowledge (Mumford et al., 2000) and the proficiency to perform “hands-on” work like the employees being supervised (Katz, 1955). Technical skills are most important for those in supervisory management or team leadership roles and least important for those in high-level organizational leadership positions. Instead, conceptual skills, or skills that refer to one's ability to think abstractly through hypothetical situations (Katz, 1955) are critical for the strategic planning (Mumford et al., 2007) and problem solving (Mumford et al., 2000) required of the upper echelons of the leadership hierarchy. Katz (1955) also posits that conceptual skills are least useful at the supervisory level where more hands-on knowledge is critical. Human skills refer to the ability to interact and work with others (Katz, 1955), including self and interpersonal emotion management, social perceptiveness (Mumford et al., 2000), and communication skills (Mumford et al., 2007). Unlike their counterparts, human skills are valuable at all levels of organizational leadership.

As per our proposed model, organizational and individual needs analysis should be conducted prior to training initiatives to ensure that selected employees will be willing and able to apply learned skills. Additionally, in tandem with the skills approaches to leadership as put forth by Katz (1955) and advanced by Mumford et al. (2000, 2007), ROR suggests that training should be provided for the successive position rather than the current position (i.e., entry-level employees receive training for first-level manager positions), avoiding promotion to incompetence. Selected entry-level employees, then, should receive training focused on technical and human skills as these skills would be most useful in their immediate future roles. This would prohibit skill decay that occurs when skills are taught but not utilized in subsequent tasks (Arthur Jr, Bennett Jr, Stanush, & McNelly, 1998; Blume, Ford, Baldwin, & Huang, 2010; Salas & Cannon-Bowers, 2001; Tannenbaum & Yukl, 1992). Once the first stage of investment in technical and human skills has taken place, the organization will then be able to reassess each option (in this case, each employee) to determine if he or she is contributing value and if there is potential for further managerial promotion. If this is not the case, then these options should be abandoned, thereby shrinking the number of options in the portfolio for subsequent funding.

In following this progression, selected first-level managers should be trained primarily with the intent of improving human skills (e.g., interpersonal and social judgment skills), which are essential for effective mid-level managers. Once this training has taken place, organizational leaders should again assess this round of funding and determine which employees should progress and which should be retained at their current level. For those employee options that are abandoned, while they will not receive additional training investment in order to ascend the leader succession ladder, their prior training in technical and human skills will allow them to remain as effective first-level managers. In this way, an ROR approach limits the downside risk by assessing employee options at each stage within the organizational hierarchy and, rather than promote to incompetence, employees are retained for competence.

Finally, selected middle managers should receive skills-based training focused on conceptual and human skills (e.g., conceptual, problem-solving, strategic, and interpersonal skills) required for executive-level leaders (Katz, 1955; Mumford et al., 2000; Mumford et al., 2007). In doing so, an organization-wide system of leader succession, a CLP, is in place such that employees at each level have been trained in the skills needed to excel at the next level rather than focus purely on their present position. Because of the overlap in skills, employees should be able to not only rise through the organizational levels but also be prepared for lateral transitions as needed. This option may be particularly attractive for employees who do not wish to continue with managerial advancement but value task variety.

Research examining the efficacy of leadership development programs has been mixed (Collins & Holton, 2004; Powell & Yalcin, 2010), suggesting that some initiatives may be more successful than others. One explanation for these findings is that leaders at different levels require position-specific skill sets (Katz, 1955; Mumford et al., 2007). As such, universal leadership-training programs may be insufficient and lead to poor training transfer on the job (Blume et al., 2010). Therefore, we extend the following proposition:

Proposition 3. Targeted, future-oriented, skills-based training will be positively related to successful application of the skills needed for advancement into future leadership roles.

2.6. Post training skills assessment and promotion decisions

Because ROR requires a system of sequential, incremental funding as well as assessments of performance or value before increased funding (McGrath, 1997), employees must be evaluated after each round of funding (i.e., leadership skills training) as either providing a positive return and therefore selected for continued investment and advancement in the leader succession or identified as a strong fit for their current position but not for further advancement. For the purposes of evaluating forward-looking leadership skills acquired through training, assessment of behavior (i.e., if and how training informed behavior on the job), as per Kirkpatrick's (1976) taxonomy of training criteria, is most paramount. Applying ROR to CLPs will only be as successful as the ability to swiftly and objectively abandon failing options as assessed by behavior, which can be difficult if there are not clear indicators to measure the value of the options or preset timeframes to do so (Adner & Levinthal, 2004). To address this issue, clear and objective performance criteria should be used to assess skills attainment and application (Arthur Jr, Bennett Jr, Edens, & Bell, 2003; Salas & Cannon-Bowers, 2001) following training initiatives. Although the skills assessed post training should vary to some extent depending on the goals of the training (Burke & Hutchins, 2007), evaluations of behavior should not extend beyond the boundaries of the training goals. Adherence to this pillar of training evaluation is particularly important given that this aspect of training criteria, in particular, is easily muddled by irrelevant environmental or contextual factors (e.g., Quiñones, 1997). It is imperative that *how* the skills (e.g., standardized, objective evaluation criteria) are assessed should not vary from individual to individual to avoid injections of favoritism or bias into the evaluation process.

From an ROR-perspective, Barnett (2008) sought to address this by suggesting a dichotomy of roles between operations - the project chairpeople - and governance - the executives in charge of allocating resources and selecting which options to fund (Ocasio & Joseph, 2005). In doing so, Barnett argues there is a natural system in which to deescalate commitment. Direct supervisors are more likely to escalate commitment due to their proximity to the employees and their role in the initial investment. To lessen the impact of biases in such cases, HR representatives and upper-level executives should allocate resources, including promotion, compensation, and additional training to the employees. As the allocators control a finite pool of resources, each employee option represents a potential opportunity cost such that funding can be applied to either new employee options or those already in the funding stages. Therefore, the resource allocators' pessimistic perspective will balance the optimism from the employees' champions (Barnett, 2008).

Another option for mitigating potential environmental influence in the evaluation process is to allow for multiple attempts to transfer learned skills on the job. While the determination of the appropriate number of transfer attempts will vary from firm to firm, this suggestion is compelling given that the skills that can be demonstrated appropriately in one context will vary, providing access for appraisal of one skill set (e.g., interpersonal skills) but not necessarily others (e.g., problem-solving skills) across all organizations. Providing multiple attempts to transfer training in context, then, follows recommendations for evaluating multidimensional constructs (Edwards, 2001). In addition, simulating the breadth of future work tasks (e.g., work samples, assessment centers) on which employees have already been trained has been found to be moderately to highly correlated with future performance evaluation and promotion performance (Hunter and Hunter (1984). Finally, applying learned skills in context is critical for adjusting and improving performance (Bandura, 1991). Therefore, providing multiple opportunities to transfer skills may also offer insight into how adaptive an employee may be in the constrained circumstances in which they are likely to find themselves as leaders. Taken together, by allowing for multiple transfer opportunities, richer information from a larger span of experiences can be incorporated into subsequent decision-making processes (Blume, Ford, & Olenick, 2018), thereby resulting in more informed, less risky selection decisions (McGrath, 1999). Therefore, we propose the following:

Proposition 4. (a) Using objective standards that align with skills-based leadership training content to evaluate skills acquisition and (b) allowing employees to display, through multiple, in-context transfer attempts that they can be successful in future leadership roles will result in less biased, less risky, and more informed promotion decisions.

2.7. Moderators

Creating customized leadership development programs that emphasize and evaluate relevant leadership skills after each progressive investment may have a number of positive proximal and distal impacts on a firm (e.g., adaptability; McGrath, 1999). However, the realization of potential outcomes is dependent on many moderators (for review, see Burke & Hutchins, 2007). The opportunity afforded to employees to practice transferring skills and employee motivation to apply learned skills in contexts outside of training are both of particular salience given the nature of the training content (Blume et al., 2010). Learning theoretical leadership skills and applying them in practice is quite different than, for instance, learning and applying exact safety guidelines or step-by-step procedures for closing a restaurant after a shift. If employees are not able to practice applying the leadership skills they learn relatively quickly after the training period ends, they will decay over time (Arthur Jr et al., 1998). For this reason, it is important that firms encourage employees to practice their skills in various contexts and offer opportunities for skill application post training outside of evaluation periods.

Beyond the capabilities of the organization, the motivation of the employees to apply what they learned in training is paramount for predicting training outcomes. In a meta-analysis of training motivation, Colquitt, Lepine, and Noe (2000) purport that trainee motivation plays a key role in both skill acquisition and training transfer. When employees perceive that applying the skills they have learned will result in the desired outcomes (e.g., raise, promotion, praise, skill attainment, etc.), they are more likely to transfer skills to their work contexts (Chiaburu & Lindsay, 2008). As such, we propose the following:

Proposition 5. Successful application of learned skills will be moderated by practice opportunities and transfer motivation such that employees with opportunities to practice applying their skills soon after training completion and employees who are motivated to transfer skills will be more successful in applying leadership skills training on the job.

3. Discussion

The need for human capital development and replacement of key decision-making and executive personnel is critical to maintaining the stability of an organization (Kesler, 2002; Kesner & Sebor, 1994). Examining leadership skills-based training with the Peter Principle in mind (Lazear, 2004; Peter & Hull, 1969) begins to illuminate why organizations may be unsuccessful at internal promotion (Benson et al., 2018) and why promotion to leadership roles may, counterintuitively, derail employee success and career aspirations. For instance, employees who are promoted without adequate training may feel that they are not prepared or qualified for leadership roles due to the need for distinct skill sets that they do not possess. Such experiences may alter their career trajectory or decrease morale and commitment (Heslin, 2009).

Further, if employees continue in a leadership role despite the lack of requisite skills, they are unlikely to be tapped for future promotion without significant training or leadership development intervention. For example, a team leader who is exceptionally technically skilled but does not have equal competence in interpersonal skills is unlikely to be promoted to a more senior leadership role within the organization unless professional development or skills-based training is provided. Even so, this type of training is essentially catching employees up to where they should be rather than building new leadership skills that will advance their careers. Further, those not targeted as high-potential employees are unlikely to have access to equivalent growth and development opportunities, resulting in demoralization and dissatisfaction (Heslin, 2009). Employing CLPs has the potential to address each of these challenges while allowing for accommodation of unique organizational needs.

4. Considerations for CLP implementation

Flexibility notwithstanding, there are several key considerations that should be born in mind when implementing CLPs using an ROR framework. For instance, there remains practical concerns in implementing this system, including the measurement and assessment of leadership skills; development of clear policies that dictate which employees can take part in leadership training; and the consequences when employees fail to meet standards that would lead to promotion. Clearly, procedures for how to proceed if trainees do not meet standards for promotion must be in place. However, what these procedures entail could differ substantially from firm to firm. Should trainees be allowed to try again at some point in the future if they do not meet standards for skills proficiency during training the first time? The answer to this question could be, perhaps, dependent on the status of the other options the organization is holding. If there are no other “good” options and a staffing need exists, it would be in the interest of the firm to re-train and re-assess the employee. Furthermore, other environmental factors (e.g., competitors, technology, market trends, turnover, etc.) may also influence the decision to retain less than ideal options. Additionally, if trainees do not meet minimum qualifications that align with training goals, what are the ramifications of telling trainees that they are not qualified and will not be promoted? Answers to this question may, again, differ from firm to firm, but, regardless, this is a circumstance that must be handled delicately.

It is worth noting that (1) firms already must address employees who are unsuccessful at promotion attempts and (2) there are some ways to mitigate potential negative reactions to ROR-based selection decisions, which have already been discussed in concert with the CLP Model. For instance, thorough individual needs analysis can provide a starting point for understanding employees' motivation for training (e.g., skill acquisition v. advancement). Ensuring that an employee's aspirations align with the goals of training is a practical way to avoid the fallout resulting from unmet expectations (Chiaburu & Lindsay, 2008; Grossman & Salas, 2011). Similarly, in tandem with employee aspirations, developing a clear staffing plan can help target the employees whose professional development needs best fit the current and future staffing needs of the organization (Tannenbaum & Yukl, 1992), limiting the number of employees who may be offered leadership skills training with no clear path forward in the firm. By re-investing in targeted career planning and professional growth, firms can reduce the demoralization employees already feel when they are overlooked in favor of rising stars in the organization or take on roles that stretch beyond their ability (Heslin, 2009).

Perhaps implicitly, underlying the success of CLPs is the need to re-evaluate and equalize HR's balance between strategic succession planning and career development for entry-level employees. Setting long-term goals, especially when candidates opt to take a non-traditional career route (e.g., build leadership skills without advancing) or wish to engage in career exploration (e.g., collaborating across departments or projects or cross-training), may simultaneously provide the stability and professional development opportunities that employees crave from organizations (Anderson et al., 2017; Foong-ming, 2008; Martin & Schmidt, 2010; Valcour, 2014). HR professionals undertaking the challenge of employees career management should also bear in mind that promotions may not look the same for all employees. Drawing from employees who have reached their successful plateaus, creating a career path at the end of which employees are challenged and satisfied does not necessarily need to reach to the top of the organization (Ettington, 1998). Carving out opportunities and projects that both challenge employees and align with their intrinsic interests can be enough.

5. Organizational outcomes

The CLP Model is meant to be iterative, as is the nature of ROR, and have substantial impacts on a variety of organizational processes and outcomes. Organizations that build CLPs can see immediate benefits including increased engagement and satisfaction

and decreased turnover intentions (Chen et al., 2004), which may counteract the current trends in decreasing tenure length (Saxena, 2012). By being cognizant of structuring CLPs to consider learning orientation and providing feedback (DeRue & Wellman, 2009) as well as adopting an organizational climate that recognizes and rewards skill acquisition (Leskiw & Singh, 2007), firms can reap benefits in terms of both financial (Avolio et al., 2010) and staffing (Collins & Holton, 2004) outcomes. We suggest that applying ROR to CLPs is a practical way to deliver these long-term results while also decreasing the risk faced by organizations that heavily invest in employee growth and development.

The ROR approach to CLPs offers several additional benefits and addresses several major problems in the current approach to succession planning. As suggested, organizations should intentionally increase the variance in the options they fund because the downside can be attenuated (McGrath, 1999; Mitchell & Hamilton, 1988). In traditional attempts of succession planning, the opposite approach is frequently true. At GE, three senior-level executives - Robert Nardelli, James McNerney, Jr., and Jeffrey Immelt - were selected as potential candidates to replace then CEO, Jack Welch. The executives, all men who had an average 24-year tenure within GE, had pursued relatively similar career paths by the time the succession decision was made. Such a homogenous group offered little variance and, through temporal truncation, the expected outcomes were predictable - those not selected for the position saw no other future career options at GE. The potential for more variance in terms of knowledge, skills, abilities, experiences, and aspirations within the internal labor pool increases as the amount of women and minorities "leaking" out of leadership pipelines decreases (Brands & Fernandez-Mateo, 2017; Fernandez-Mateo & Fernandez, 2016). By implementing a CLP in conjunction with ROR, firms can address a potentially critical issue - the diversity of their internal labor pool. Even outside of the needs analysis phase, which may offer insight into the need to actively recruit more diverse applicants, CLPs guided by ROR necessarily widen the potential pool of qualified organizational leaders, offering more opportunities to a greater range of employees who may otherwise not have access to leadership skills training.

Additionally, by considering each employee as a separate option, the organization is comprised as a portfolio of option bundles. Because the employee options are related to the same stream of investment (succession), they should interact to produce synergies (McGrath et al., 2004) to provide super-additive benefits that extend beyond the value of the individual underlying options (Trigeorgis, 1993; Vassolo, Anand, & Folta, 2004). This increased value is likely enhanced by the important spillover effects that exist in enhancing learning as well as diversifying to buffer against risk (Dierickx & Cool, 1989; Lee et al., 2007; March, 1991; Sitkin, 1992). Indeed, since the only skill set that has been suggested to be consistently important across the levels of leadership is interpersonal skills (Katz, 1955), the opportunities for positive externalities stemming from learning and interacting between and among employees will increase. Further, by diversifying against risk, the potential downside of focusing the training on just a select group of employees (e.g., executives) is reduced such that if they are unable to learn the requisite skills or terminate, the organization is able to overcome the loss because the organization has been transformed into an environment of ongoing learning (Beltrán-Martín et al., 2008).

6. Future directions

While our CLP Model and propositions are adopted from research in the financial markets literature (Barney, 1986; Fama & Miller, 1972; Lander & Pinches, 1998) as well as research regarding leadership development effectiveness (Collins & Holton, 2004; Leskiw & Singh, 2007), empirical studies that test the potential for this guiding framework are essential in understanding the utility of applying ROR to leadership development in organizations. To understand the impact of ROR-based CLPs, a longitudinal, case-based approach would likely be necessary to capture the full range of possibilities during and after implementation of an ROR-based leadership pipeline. Field studies should focus on tangible organizational benefits commonly assessed when evaluating leadership development and job attitudes, including a comparison of the cost (Avolio et al., 2010) and effectiveness (Collins & Holton, 2004; Druskat & Pescosolido, 2001; Powell & Yalcin, 2010) of current leadership development programs as compared to ROR-based CLPs; an examination of employee turnover data (Chen et al., 2004; Cordero et al., 1994; Foong-ming, 2008), including information from exit interviews to inform reasons for turnover; an evaluation of job satisfaction and organizational commitment (Chen et al., 2004); and dollar-amount ROI associated with CLPs that apply ROR (Avolio et al., 2010). If possible, field studies should opt to compare CLPs that utilize ROR decision making to a control group within the same organization.

Quasi-experiments that roll out changes to groups (e.g., departments, teams, locations within a multi-national company) while maintaining one or several control groups within organization are common in behavioral economics (Henrich et al., 2001; Levitt & List, 2009) and offer numerous benefits with respect to evaluating the utility of CLPs. Most notably, field studies that include a control can aid in providing specific insight into how the changes will impact the organization from a baseline inclusive of similar extraneous effects. This is not the case when comparing to a previous point in time. Additionally, rolling out changes in a piece-wise fashion across an organization more easily allows for adjustment of policies and implementation strategies when problems and concerns arise.

7. Conclusion

The notion that career planning is no longer within the purview of one's organization may impact the expectations of both employees and employers. From the perspective of employers, long-term investments in employees may be considered unwise if the assumption is that employees plan to leave the organization before the investment pays off. However, employees' perceptions and intentions to stay at a firm may be greatly influenced as well if employees assume their options for advancement, task variety, or challenge must come from outside their current employer. Taken together, it is our position that by adjusting succession planning

policies to span the organization in accordance with the pillars of ROR, it may be possible to create CLPs that simultaneously decrease turnover, increase the likelihood that employees will be in the right place at the right time, and reduce risk associated with large investments in employees. By carefully assessing organizational and individual needs to aid in the selection of employees for appropriate leadership skills-based training, firms can make better, less risky decisions when selecting organizational leaders.

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