social sciences

Case Report

Leadership Talent: A Study of the Potential of People in the Australian Rail Industry

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Abstract: This paper discusses the importance of leadership talent in the rail industry in Australia. Like many other countries around the world, rail is troubled by its ability to attract new talent as older leaders with specialized knowledge retire. This study sought to identify whether the sector is making the most of the talent already existing within, knowing the barriers faced in attracting new industry entrants, and questions what can be done to strengthen current approaches to developing leaders. In exploring the meaning of leadership talent, from a skills based perspective with three levels of leaders, blended methods using semi-structured interviews and a survey were utilized. The study is important because it focuses on the people aspects of the industry, a little researched area of rail that has major implications for how employees are engaged and retained. The findings identified a certain mindset, culture and approach about leadership talent in organizations that overlooked the heterogeneity of rail organization populations, precluding certain groups of people from becoming leaders. The project identified that leadership and other soft skills required in the rail industry are both under researched, and often undervalued, for the impact that they can have on performance and productivity of companies. There are key messages from this study for both organizations as well as inspiring rail industry leaders.

1. Introduction

Australian rail industry leaders belong to an exceptional group. For decades, they have fostered the cultural constructs of the industry that are built on the foundations of tradition and time. Idiosyncrasies

of leadership are learnt through informal mentoring and guidance, and only offered to a selected or "talented" few.

At a time when the industry is altering dramatically, this case study touches on workforce issues of who can be a leader in the future, diversity over heterogeneity, and the need to have a new mindset about leadership talent in the Australian rail industry. Ageing leaders with contextual knowledge are retiring, and new workplace configurations require different skills for the future. One of the greatest challenges to face organizations is one of empowering younger generations to see the relevance of the industry for a rail career. In recent times, numerous rail associations [1,2] have prioritized leadership issues because of the future impacts on the entire workforce but little has changed. Yet, in other areas individuals such as engineers, tradespeople and operational staff have been attracted to these industries "in ways that rail does not" [3]. In this scenario, something can be gleaned from what individuals are looking for in their leaders, what organizations may be able to offer, and what talents are needed for leaders in contemporary rail organizations.

Thematically, this paper outlines the narrative of the Australian rail industry that is characterized predominantly by male employees with strong, historical traditions and many family links to rail. Limited diversification of the rail workforce show women occupying less than 12 percent of the total rail careers, predominantly in customer service, sales and clerical roles [4]. Senior experienced rail leaders and managers hold the majority of leadership roles while there is a significant leadership gap in the younger age groups [3]. Compounding external events such as the enduring turbulence in global financial markets and rising costs of living have further impacted some leaders' decisions to maintain their positions and postpone their retirement [5]. Leadership perceptions and the high number of older workers in rail have a significant impact on the motivation and enthusiasm of younger employees aspiring to a leadership career in rail. Time to wait to succeed in new roles is one of the key reasons cited by employees leaving the industry because visible career pathways are stifled. Rail has an image problem, often viewed as an "old fashioned" industry by younger employees [6].

In the light of these themes, projected rail workforce difficulties will be further impacted if leadership ability and the new currencies required for sustained commercial achievement in a knowledge based economy are lacking [7]. However, a defining characteristic of the current rail industry is the predominant concentration of the total rail workforce in job roles and occupations at the lower levels with "elementary to intermediate skill levels" [4], often without formal qualifications but who comprise the traditional, fixed-employment workforces. More often than not, those who could be leaders in the future are mobile, savvy and highly educated, and not likely to stay in the industry long-term.

The CRC Initiative

From 2007–2014, the Cooperative Research Centre for Rail Innovation [1] enabled researchers to investigate a wide range of important workplace issues for the rail industry. In particular, the Workforce Development theme of research, from where this project on leadership talent was situated, aimed to identify a number of innovative strategies around education and training resulting from the human resource challenges facing the rail industry at this time.

2. Objective and Aim of the Study

The principal objective of this paper is to explore the meaning of leadership talent offered by leaders at executive, middle and frontline levels in rail organizations in Australia. In addition, the similarities and differences offered by leaders at each level are analyzed and compared to ascertain the subjective and abstract qualities of the phenomenon. Bringing to light these definitions will assist in developing new comprehensions of what is now required for leadership and move our ideas of leadership talent from the past to the future. To achieve these objectives, a sequence of questions were posed to each level of leader as follows:

- What is your role as a leader in this organization and your particular skills and talents in leading others?
- Who is a leader that you have admired at work and what are their talents for leading others?
- What talents should be now be considered as important for "good" leaders in rail organizations?

3. Leadership Talent Literature

Starting with the premise that the Australian rail industry needs leaders who are open-minded, globally aware and educated, the leadership talent literature was investigated.

The scope of the review was predominantly on writing from 2006–2014, but earlier works were also included because of their importance in the initial talent concept (for example, [8–11]). The writing highlighted the global viewpoint, organizational perspectives not individual standpoints [12], and the interconnectedness of the world [13,14], causing opportunity to reflect on the importance of leadership talent in the Australian context.

The terms "talent", "leadership talent" and "leadership talent management" were applied to articles using a number of screens such as journal type and focus, year of publication, application to the Australian rail industry, cultural context, methodological consideration and topic, to locate literature relevant to the research problem. Literature was considered against a human resource development (HRD) frame because the HRD discipline is constructed from theories with an economic, systems and psychological base [15], and broadly accepted as a subject with the purpose of improving individual performance within an organizational context [16]. Briefly, a timeline emerged from 1998; with the pioneering study of Chambers *et al*. [8] and subsequent publication of the book, *The War for Talent* [9] to the present time where the aftermath of the 2008 Global Financial Crisis (GFC) highlights the important role of leaders in business.

More than eighty articles were reviewed to seek answers to questions about leadership talent, subsequently arranged according to seven main questions for this review:

- What is talent?
- What is leadership?
- How is leadership talent defined?
- Why focus on leadership talent?
- What conditions influence talented leaders?
- How do leaders become talented?

3.1. What Is Talent?

The word "talent" has a history of more than one thousand years [17], associated with commodities of high value [9]. In recent times, Michaels, Handfield-Jones and Axelrod ([9], p. xii) describe talent as "a sum of a person's abilities", a personal aptitude that may be innate or learnt, or developed through different experiences. Boyatzis [18] interprets talent as a behavioral indicator or "an intelligence" which is observable, related to physiological makeup, adding value to the individual's personality and developed by life and career experiences. Factors which influence talent (such as capacity, ability, health, intelligence, education, motivation, job satisfaction, opportunity to perform, working conditions) must come together in certain combinations to affect performance outcomes [18,19]. It is thought that using the word "talent" is misleading in a business setting because only a few people are born "talented". Nevertheless, the ability or potential to develop further is available to each person [17], generating new possibilities based on learning, growth and change [20,21].

During the pre-2000s, talented leaders were believed to be capable performers, already at the peak of their expertise [22], and talent management was correlated with hiring the most accomplished individuals to lead organizations through stable passages of business. Changing labour market conditions swept the winds of change through organizations as deregulation and privatization of companies quickly destroyed the job for life concept. Recent talent articles and definitions demonstrate these clear paradigm shifts from the early studies because the business world has changed dramatically [23]. Noticeably, in the last few years, talent literature takes a new turn, as organizations face ongoing external turmoil. Recent writing considers aspirations of individuals and performance management [24], the development of leaders [25] and managing Generation X and Y [26].

These are integral parts of talent, but there are still limited articles on developing specific areas of talent such as leadership, framed in terms of "talent". Based on the central tenet that talent belongs to the individual, is associated with "potential" and can be developed, leadership talent is explored from the perspective of what individuals can do to develop their potential.

3.2. What Is Leadership?

The topic of leadership occupies an inordinate amount of writing in the scholarly literature constrained only by the paradigms dedicated to the different theories. In the approach to defining leadership, no one definition can be found, however, writers including Northouse ([27], p. 1) concur that leadership is a "highly sought after and highly valued commodity". In Bass and Bass [28] leadership in early civilizations is explained in terms of societies developing myths and narratives about individuals' importance in the quest to dominate others, especially evident where there have been great disparities of wealth. Nonetheless, leadership in societies has been necessary for thousands of years to foresee future opportunities and to direct others [29].

In the literature, contemporary theories of leadership follow a chronological timeline aligned with the social mores of the times. The philosopher Plato (400 BC), born into an aristocratic and wealthy family, considered only certain class structures of people or "philosopher kings" had the intelligence and self-discipline to make decisions for others [30]. Industrialization saw the rise of "great man theories" of the late 18th century [31] where the "hero" contributed or developed something of great value [28].

Power over workers with less influence elevated this theory to cult status for almost one hundred years, perpetuated by beliefs of heredity combined with both luck and perceived ability. Popular during the world wars, (inherent) trait theory (measurement of traits, patterns of behavior, thought, and emotion, attractiveness and intelligence), developed by Sir Francis Galton 1822–1911 [32] was believed to contribute immensely to leadership ability. Management theories where leaders were "scientifically selected" on their motivation for their role [33]; behavioral approaches (the belief that leaders can be made rather than are born with successful leadership based on definable, learnable behavior) [34]; contingency theories (relationship-oriented leaders can be effective if their leadership orientation fits the situation) [35]; transactional leadership theory (a series of "transactions" and a clear chain of command enables leadership) [36]; and transformational leadership theory (connections between leaders and followers is the base for goal achievement) [37] are some of the other theories. Since 2000, leadership theories based on complexity [38] dominate the literature for the reason that, in a knowledge economy, leadership is based on learning, innovation and adaptability to changing operational environments.

What is obvious in the writing is that many authors claim that leaders move groups of people from "one paradigm to another" [39] through a process where the leader "influences a group of individuals to achieve a common goal" [27]. Contemporary ideas indicate that the skill of influence is important in affecting others actions; that leadership is a process, occurs in groups and involves common goals. Be that as it may, Northouse [27] and others [40–42] believe that leadership skills can be developed.

In a rail company, a leader at the senior level would be expected to have a set of skills, knowledge and expertise in a particular rail relevant field such as engineering, commerce, finance or accounting. These skills would have been developed through formal learning, and then practice within the industry, to enable senior leaders to be visionary, strategic and focused on the future. At this level, management skills are a subset of leadership in that conceptual and critical thinking skills are most important. At the middle and frontline levels, leadership is a subset of management in that these roles are mostly concerned with managing operational and day to day matters. The leadership aspects of the role at middle and frontline levels involve looking after, caring for, and enabling people. Before a middle or frontline leader could move to a more strategic role at the senior level, important discipline knowledge of engineering, commerce, finance or accounting should be considered as important.

3.3. How Is Leadership Talent Defined?

Combining both "talent" and "leadership" highlights the paucity of literature with leadership talent duly stated and defined. What is apparent is the interchange of many terms (talent, manager, leader and leadership), confirming that organizations are searching for talented leaders, managers, experts and specialists or "thought-leaders" [17] who have the ability to see the future and to take the lead in ever challenging situations. Although numerous articles refer to leader ability as a component of "talent", most are unable to define what this means because there are emerging contextual variables that impact each point of view. One concept is that of leaders with an agile mindset—or learning applied to development and transformation of self as a leader in complex, operating environments [43], required by leaders across all levels of organizations [40]. Becoming a better leader in a global, knowledge economy, confirms the idea, from the perspective that leadership, knowledge and abilities can be

developed [27,44,45], and that understanding the interdependencies of the external and internal worlds enhances leadership [44].

3.4. Why Focus on Leadership Talent?

The review highlighted numerous reasons for a focus on leadership talent and the importance of human capital related to seven key environmental factors that have changed organizations and affected the ability of leaders. These include: changes in economic production [46], the impact of technology [47], structural changes in organizations including those owned and controlled by government [48], the rise of multinational corporations [49], changing business competition through global trade and exchange [50], changing patterns of employment [51] and increasing knowledge and skills required for knowledge economy [52].

In a knowledge economy, founded on the premise that human capital is a strategic asset, there are vast difference between the industrial economy (18th–20th century), where unskilled labour, machines and raw materials fueled production; and the agricultural economy (pre 18th century) that was reliant on land, land owners and workers. Accordingly, business, education and civilization has changed dramatically since the rise of a *digitally* literate society. In both the agricultural and industrial age, accurate information had to be distributed by written means [53], and only accessible to those who were both privileged and literate. Now, technology enables information and knowledge to be shared freely across the world. Therefore, the knowledge economy or information age talents [53] relate to individual abilities of leveraging many sources of knowledge, developing collaborative relationships and enabling other people [46].

These profound changes have highlighted the increasing focus on performance achievement and commercial success in business enabled by talented leaders. To exemplify these changes, early railways, developed during the 1850s onwards, provide an example of what happens when there is an economic transformation of business models. In the industrial age, great importance was given to physical assets that required considerable capital investment in resources and infrastructure using unskilled labour [53]. As structural changes have impacted rail workforces, it has been increasingly evident that educated leaders and highly qualified rail workforces are increasingly valued for their ability to achieve high levels of organizational performance [4]. This is due to the fact that, in a globally connected world, human capital is now the only source of competitive advantage.

3.5. What Conditions Influence Talented Leaders?

There are three sets of conditions that influence leadership talent. These are related to personality dimensions, opportunities in life and at work, and ongoing learning applied to experience.

Firstly, innate dimensions of personality and cognitive ability are stable or fixed attributes [54]. Cognitive abilities relate to conceptual and strategic thinking, intellect, and the ability to deal with complexity while personality dimensions relate to sociability, dominance, maturity, stability, resilience and interpersonal characteristics. On face value, both dimensions provide an indicator of whether an individual has leadership talent.

Secondly, Silzer and Church [54] believe that indicators of an individual's skills and orientation to leadership are demonstrated early in the career through lower level supervisory experiences or leadership roles. This is for the reason that stable dimensions of cognitive ability and personality are visible.

However, there is no guarantee that this will be a straight career line to more senior roles as different skills are needed at higher levels, and other personality dimensions come into play.

Entry level roles require task related skills in regard to particular types of work [27] where planning, clarifying expectations, monitoring operations and performance of tasks are typical functions [55]. The ability of leaders at this level to move from task focused roles to more senior roles is very much associated with the ability of the individual to conceptualize and "learn" one's way into more complex roles [12]. In this process, the individual leaves behind old task and technical skills while embracing new abilities associated with conceptual thinking and change. An underlying assumption is that these skills are related to cognitive abilities [56], however, having cognitive abilities alone does not make for a talented leader. Boyce *et al*. [57] recognized four other categories that must be apparent in leaders who aspire to develop higher level careers: achievement striving (energy, internal locus of control, need for success); mastery orientation (self-efficacy, conscientiousness, openness to experience or calculated risk-taking, learning orientation, intellectual maturity, and meta-cognition); career growth (feedback seeking and different career experiences); and work orientation (commitment to work).

Thirdly, the career dimension is not always fully apparent because the potential of the individual (talent) needs the right conditions and opportunities to be realized [57]. The career dimension can be stated in terms of readiness to embrace new opportunities and the availability of potential opportunities. Silzer and Church [54] claim that, within the career dimension, there are two additional areas that provide important signposts for success as a leader including performance (track record), and knowledge and values (cultural fit of individual to organization, technical skills, willingness for mobility). McDonnell [23] suggests other factors such as understanding the extent, timing and level of the career factors and combinations must also be considered. Many writers (for example, [58,59]) acknowledge that ones' life and leadership experiences contribute greatly to personal capabilities, being progressive over a lifetime especially where there are smooth and difficult passages along the career journey. Leadership not only includes growth processes on this trajectory, but processes of decline, gains and losses that shape the character and identity as a leader [60]. Added factors in the career dimension might be that certain career goal aspirations are different for different generation such as younger leaders seeking more work-life balance over their career than previous generations [61].

3.6. How do Leaders Become Talented?

Notwithstanding experience, new leadership studies reveal that developing leadership skill, or the talent to be a successful leader, relates to personal development or stages of adult development. These ideas are consistent with Piaget's early work on theories of cognitive development, constructivism and learning [62]. In very early work, Piaget [63] posited that an individual's knowledge is based on the degree of success and ability in adapting to change in the outside world, and the subsequent accommodation, assimilation and equilibration of new ways of knowing from existing mental schemas. Recently, constructive development theories (stage theories) have evolved from these influential traditions, incorporating adult development [64,65] and extending Piaget's concepts [66,67]. Constructive development stage theory proposes that adult development (incorporating an individual's personal and professional aims and goals as well as personal needs, capabilities) is not age linked [68].

Rather, individuals progress to different stages as they evolve and develop new ability for complex thinking, incorporating new knowledge from previous stages [66].

Robert Kegan's constructive development theory [64,65] is based on the development of consciousness (identity) described as being in "five stages" ([65], p. 5). Development takes place through an unfolding awareness and each stage of development "transcends" the stage that precedes it [69]. Confirming previous arguments in this literature review [54,57], Kegan [65] states that many adults do not have the cognitive development to deal with the complexity of a changing world (lack of opportunities to learn and develop a strong identity as a leader). Not only does thinking stage influence leadership talent; Day, Halpin and Harrison [70] also state that before leaders can move to a more complex way of knowing, brought about by exposure to learning, they have to recognize that they firstly hold certain preconceived assumptions, principles and perceptions of the world.

Northouse's [27] skills based approach to leadership concurs that leadership talent can be developed. However, the types of formal and experiential learning relevant for leaders in rail, highlight vast differences in methods, industry needs and changing skill requirements over the past forty years as a start [38]. Garavan [12] states that in entry level leadership roles, training is beneficial in imparting technical and management skills required at middle and frontline roles but for higher level roles a full spectrum of soft skills are needed to meet the demands of changing environments. A range of workplace experience and on the job learning, experiences in the organization, through work and other activities (as in situated learning, [71]), being coached, mentored, receiving feedback and formal development of skills through qualifications and learning contribute to the development of knowledge, skills and identity as a leader [60,70,72].

3.7. What Are the Effects of Talented Leaders and Leadership?

Positive outcomes of talented leadership include those at the individual, team and organizational levels [73], including shaping organizational culture and modelling positive behaviors for others. Other outcomes noted by employees in being guided by talented leaders include job satisfaction, happiness and psychological engagement with work [74]. At the team level Orazi *et al.* [73] believe that talented leaders create positive team environments, greater team effectiveness, lower levels of absenteeism, improved conflict resolution, more open communication while providing opportunities for aspiring leaders. In regard to the organization, greater productivity, increased financial performance, innovation, organizational renewal, work quality and customer satisfaction, can be achieved by talented leaders [73].

3.8. Reflections on the Literature

The literature review set out to investigate writing about leadership talent for the rail industry context, viewed through a human resource development (HRD) frame of reference. The review followed several main lines of enquiry using seven questions about leadership talent to frame the existing literature. The subsequent research in the Australian rail industry was formulated in view of the dialogue about leadership talent identified in the literature.

4. Method

Leadership is concerned with people, with the literature confirming that leadership is a socially situated function. Unlike much of the other research conducted in the rail industry environment that investigates hard facts about, for example, engineering, machines and numbers, an approach that considered the multifarious aspects and complexity of people required an approach that was not purely "black and white". While quantitative research is concerned with a positivist philosophy, qualitative research is best applicable to cultural phenomena where there are many questions to be answered [75]. Questions about *meaning* (how people make sense of the world); questions that shed light on the *context*; and questions that investigate *processes* [76] can unearth "complex workplace politics" that may not come forth in quantitative approaches [77]. While numbers can reveal the quantity of people who believed certain issues this approach cannot reveal "why it happened", "how it was done" or "to what extent". Not to be entirely contradictory, Thompson [77] also considers that even within qualitative research approaches, there is room to incorporate elements of measurement such as in calculating *how many*, for example.

4.1. Interpretivism

In continuing this discussion about qualitative research, an interpretive approach that has a philosophy that seeks to understand the phenomenon (leadership talent) from the individual's perspective and experiences is proposed [78]. Therefore, the study may reveal versions of reality that may be similar or dissimilar to those of other people, and with multiple claims to knowledge [79]. Since the rail industry has evolved rapidly since deregulation in 1993, with many leaders experiencing various organizational configurations and different leaders in authority throughout their working lives, the interpretive approach involved a critical evaluation of participants' own versions, of what they would call, the truth [80].

4.2. Research Design

The research design involved a case study of the Australian rail industry, undertaken in three settings, with information collected from executive, middle and frontline leaders, using blended methods of semi-structured interviews and an online survey. A case study research design outlining who, what, where, when and how was chosen to illuminate leadership talent [81], and was confined to participant partners of the CRC workforce development projects. Organizations were selected based on their industry characteristics but different business variables that would influence their contextual situation including talent needs. This included their state base, size of organization, sectors and types of rail business operations, as well as their accessibility from the researcher's location. This selection provided a broad cross-section of Australian rail industry organizations, a large geographic reach and the potential to provide different perspectives on the research problem. The relevant characteristics of the three settings are summarized in Table 1.

Case study approaches have advantages in exploring information in an enclosed or "bounded" system (such as the Australian rail industry context). Although they have been critiqued as less vigorous research due to the volume of information, and the varying accounts of different occurrences that can contribute to bias in the findings [82], this design had four tests applied to determine its quality, or trustworthiness. These tests are described by Angen [83] as the research design's "authenticity" (Are different voices

heard?); "credibility" (Are the results an accurate interpretation of the participants' meaning?); "criticality" (Is there a critical appraisal of all aspects in the research?); and "integrity" (Is the researcher self-critical?).

Table 1. Characteristics of organizational settings.

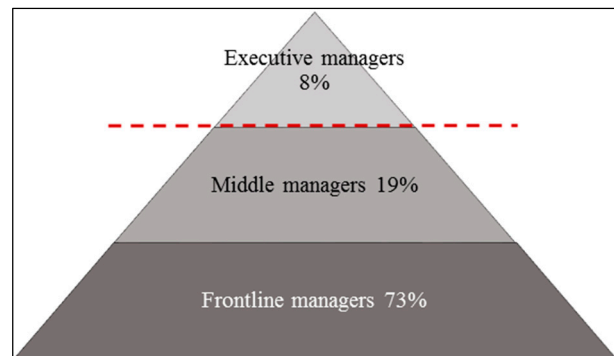|	Organization A	Organization B	Organization C
Type of Service	Passenger services including train, bus and ferry and infrastructure maintenance and development	Track infrastructure and train control (dispatch) services in remote Australia	Passenger rail services in metropolitan area
Sectoral representation	Public sector	Private Sector	Public/Private partnership
Location (city and rural)	City and rural	City and rural	City
Size (staff numbers)	1463	238	3700

5. Findings and Discussion

This paper set out to address three research questions: what is your role as a leader in this organization and your particular skills and talents in leading others, what are the talents for leading others that you have admired in other leaders, and what talents should be now be considered as important for "good" leaders in rail organizations?

5.1. Background

For at least twenty years in Australia, rail organizations have been continuously restructuring. Many leaders expressed the changes in terms of what they observed and experience now as compared to their experiences as younger employees. Some lamented the changing face of the rail industry and the demise of government ownership with one leader describing the culture and history of rail as, "…a proud history…my family (my brother, father and I) have over 65 years in the Australian rail industry, most of the time as leaders" (Survey, Qn 20).

This constant reorganization required a strong imperative to continue rail operations without disruption. In doing so, organizations tended to maintain leadership positions at the middle and frontlines to meet ongoing business requirements, while executives embraced new opportunities.

What was obvious was the distinct line between the executive levels and the middle and frontline (illustrated in Figure 1). In rail companies, frontline leaders comprised the greatest number of leaders (73 percent), with middle level leaders (19 percent) next, also confirmed in the associated rail study by Short *et al.* [74]. A change of leaders at the middle and frontline occurred relatively infrequently demonstrated by long careers of continuous rail industry service, learning and skills developed on the job and fixed ideas of leadership for the industry.

Figure 1. Reorganizing teams at the top.

5.2. What Is Leadership Talent?

An exact definition of leadership talent was not identified by any leaders, exemplified by this statement from one executive leader:

> I'm certainly not aware of one in the sense of do we have a bit of paper which says here's what we want from leaders and we're going to try and identify people who have those particular attributes or skill sets and do we communicate that? No. I've certainly never seen that written down on a bit of paper… (Executive leader, Organization A, male).

5.3. What Is Your Role as a Leader and the Way You View the Skills Required to Lead Ohers?

Executive leaders demonstrated high-levels of personal and professional power through their extensive knowledge of strategy, their management chain of command, their expertise and a high degree of passion for the complexity of technical work. The definition of a talented leader focused on individuals with technical knowledge and expertise, professional qualifications and the importance of senior leaders. As one described, "…we are lacking in experienced people, particularly engineers" (Executive leader, Organization B, male). He also suggested that leadership talent included the ability to build teams and developing positive relationships within those teams, articulated as follows:

> I think that leadership is about leadership rather than managing and it's about building teams; about building relationships with people who lead those teams and setting the appropriate examples and that extends to our contractors also. There's a vast difference between managing—situations can be managed, people need to be led, and I think that at the executive level one needs to recognize that leadership takes precedence over management (Executive leader, Organization B, male).

While they had concrete opinions about some leaders they had observed through the course of their careers, one agreed that good leaders are able to guide people:

> I think a good leader takes people with them rather than pushes or coerces them. I think good leaders that I've seen are very clear on the goals and targets they want to achieve and they communicate that with their people both widely and also on a personal basis (Executive leader, Organization B, male).

Desirable personal characteristics at the executive level included the importance of being able to gain commitment from teams when implementing strategic initiatives, and "confidence", conviction and commitment in believing in the direction of plans. Maintaining a high presence with stakeholders and people throughout the organization created a sense of safety, belonging and assurance in the organizational approach to business. The capacity to remember and utilize information about people was also regarded as an impressive skill by several executives, perceived to be underpinned by a sense of self-awareness, strong personal values and authenticity.

> I think he's got very good interpersonal skills. Besides the fact that he's the boss, he is happy to talk to anybody...he remembers that sort of stuff and raises it with people...always very impressed with that, so I think it's the common touch...(Executive leader, Organization A, male).

Expressed in terms of a personal leadership "style", talent was believed to relate to "presence" or charisma, aura, authority and poise, which enabled the leader to depart from their own agenda, as described in this quote, "He was very open and personable; he was confident in his approach; he was willing to listen...he had a presence because of the way he reacted with people..." (Executive leader, Organization C, male). Furthermore, presence included a relationship building, putting people at ease, respect, and a personal approach.

The middle level leader cohort provided a different perspective on leadership talent, speaking about how they looked after their teams and "maintained the community of rail" (Middle level leader, Innovative Rail, Qn 5). What this meant was that the promotion to middle leadership was an exalted achievement, resulting from strong technical and organizational skills not educational achievements. In general, middle level leaders were found to be highly personable and likeable as demonstrated by this leader's ability to undertake different roles in the industry:

> Well, I have worked for the organization for 35 years and I've just gone up through the ranks—through the organization doing different jobs from time to time; different locations; different types of jobs and positions and I've just moved into this role you might say (Middle leader, Organization B, male).

While their personal leadership journey through numerous experiences honed their skills, they indicated a desire to maintain the "common touch" with others even though they had been given a "lucky career break":

> I started out as a junior locomotive operator...I got my experience up...moved to a team leader role...went to Train Control...learnt the role over a number of years...then I was given a golden opportunity...to middle leader (Middle leader, Organization B, male).

In the process of rail restructuring, one middle leader had found that he had gone up, and then down, to lower roles as positions were changed or altered at different times, which made him realize that there were others with more qualifications and experience who could take hold of his position:

> Up and down—I've been up and down the ladder a few times for different restructures, changes of management predominantly—I would say probably 15 years I guess in total, perhaps a little bit longer...(Middle leader, Organization C, male).

By the nature of their unique roles, middle leaders were the go-betweens—being promoted for the time, taking written directions obtained from higher level leaders to interpret and communicate to the frontline—yet always under threat from different impacts.

Responses about leadership talent revealed the importance of the human aspects of the middle leader's role by being consistent with both actions and words. Strong listening and communication skills ensured instructions to teams were accurate, expressed as listening and balancing viewpoints, "Well, I like to think that I listen to people and that I have a balanced view…weigh up one thought against another rather than just simply running off with it" (Middle leader, Organization A, male).

Decisiveness and being able to articulate reasons truthfully, without feeling personally compromised, were viewed as courageous and admirable:

> If the decision didn't go in a particular person's favor, she would explain the reasons why these didn't go in, this is why and this is the decision that it was made on these merits…If there was something that needed to be done that was tough to tackle on an individual issue, then she would do it discreetly as necessary and move on… (Middle leader, Organization A, male).

At the middle levels, helping and caring for people featured highly as one of the aspects of informed decision-making, helping to build and maintain the community of rail. This included assertiveness skills used in a proactive way to maintain team togetherness and individual welfare as demonstrated by this leader, "…door was always open, took an interest in—if you were sick—he would call in when he had an opportunity, very reasonable sort of thing but also assertive too..." (Middle leader, Organization C, male).

Frontline leaders valued talented leaders as those who were able to provide direction within boundaries, guide, mentor and coach others, listen to ideas, give good feedback and encourage a sense of team and community. One major difference between middle level leaders and frontline leaders was that sometimes they were overseeing up to three levels of leaders and teams in roles such as "crew leader", "team leader", "supervisor" and other various terms.

Responses were varied with two of the three leaders involved in crucial operations at the frontline and the other leader in operational support. In these discussions, frontline leaders demonstrated the most focus on managing operations:

> An authorized officer…everyone calls them ticket inspectors…they're responsible for a number of different jobs—it's customer service; it's enforcing the law under the Transport Act, and we get involved in crowd control for football traffic, special events…(Frontline leader, Organization C, male).

Extensive lengths of service in frontline roles highlighted that these leaders had exceptional operational skills in the delivery of rail services when many people were involved. One leader had been in the industry for more than forty years, and although he had no formal qualifications, he described his vast experience proudly, "I joined the job in 1969. I left the government and came back in 2005. I was asked if I would like to come back, based probably on my previous record" (Frontline leader, Organization A, male). Being a good role model for others was demonstrated in another frontline leader's comments as an important attribute:

> You can't make a promise that you can't keep, and you've got to walk the walk—if you are asking someone to be this or do that, you have to do it too. You can't ask someone to do something if you're not going to do it yourself (Frontline leader, Organization C, male).

Listening skills were endorsed as follows for operational roles, "Well, I think being a good listener. That is something that is a good attribute for a leader" (Frontline leader, Innovative Rail, Qn 6) because this was a way leaders imparted an impression of confidence with their approach to getting the job done. Employees believed that if they were listened to, they felt able to have "freedom within boundaries", further elaborated by one frontline leader:

> He's a person that allows you freedom to do what you need to do, but he does give you the guidelines within which to work, so he basically sets the boundaries and then allows you to proceed and to develop within those boundaries. I think that's good leadership skills (Frontline leader, Organization B, male).

5.4. How do Leaders Become Talented?

This section set out to highlight how leaders become "talented" when none of the individuals mentioned formal and informal learning as contributing to leadership talent. As a way of delving more deeply into this issue, the question was posed about how individuals were supported if they were identified as having potential, or they aspired to a leadership role. The topic of formal and informal learning such as training, coaching mentoring, short courses and workshops were also touched upon. What was identified indicated the high value placed on technical skills, rail industry knowledge but lower value on soft skills and uncertainty about how learning could develop "talent".

Leadership processes still 'under development' Leadership and learning processes in one organization were "still under development" (Executive leader, Organization C, male). While this statement was not used in other organizations, their processes were also perceived as "still under development". Comments from executives indicated that talented leaders were highly important to organizational success but the processes to identify and develop them were immature and of low priority:

> We're starting to identify individuals but from the perspective of identifying future leaders is actually critical because we don't have enough at the moment, and you then need to mentor and develop them to the point where they can actually then assume a leadership role, so this all takes time… (Executive leader, Organization C, male).

This line of thought was prevalent since executive leaders indicated that it was individual stamina and endurance over time that led to leadership success, rather than what the organization did to help. The concept of supporting, identifying and developing different levels of leaders seemed to be dismissed because it was believed that many employees, especially at the middle and frontline, did not have the aspirations or ability to develop their career further:

> Certainly, you might amongst your management ranks to say get a bit more rigor into it but in terms of train drivers—the vast majority just wishes to remain driving trains and that's a pointless exercise (Executive leader, Organization A, male).

There was limited awareness of the untapped potential within organizations and how leadership talent could be developed at each level. This is confirmed through the demographic profile of leaders showing only 10 percent of leaders were women, employed only in frontline roles.

Importance of rail industry knowledge: The study found that organizations were focusing on an image of a leader that may have been relevant in past times. They valued those who had come up through the ranks, with a strong focus in technical areas but who did not have global experience or belong to a diverse demographic profile. This image may have been entirely relevant in the past but the ability to maintain this approach will become increasingly problematic as some leaders retire, and the pool of potential leaders shrinks.

The widespread perception that rail industry knowledge was necessary for leaders pushed organizations to identify those inside to take over roles as they became vacant. Informal strategies targeting certain people were well entrenched in all three organizations. At Organization C, the frontline leader described how he had never had to apply for any of his leadership positions. At Organization B, the executive team went around hand-selecting people for roles when new projects arose. Even at Organization A, a public sector organization with merit-based selection processes, the executive leader described how the team identified the critical jobs in the organization, the potential people to take over those jobs and then those people were approached to prepare for the opportunity. The resulting messages portrayed to other employees unintentionally perpetuated myths that senior leaders had the most power and importance over leaders at different levels, and they could select whoever they liked for certain roles. Failure to communicate transparent messages about leadership talent widely established feelings of mistrust and misunderstanding, and excluded diverse groups from many leadership opportunities that were not publicly promoted. However, recent studies on workplace productivity reinforce how diversity in leadership talent contributes to innovation, no matter what the industry.

Developing leadership talent through learning: Executives had successfully transcended to higher levels of leadership on a life-long journey, demonstrated by their self-motivation for learning. A high degree of personal responsibility, commitment to their careers over 30 to 40 years, formal qualifications and professional expertise contributed to their success. All of the executive leaders (aged between 50 and 60 years of age) demonstrated the ability to endure change, maintain alignment with career goals and a belief in their ability to succeed over other candidates for key strategic roles. Learning and development opportunities undertaken on the job were seized as they arose. A personal need and ability for achievement indicated that current executive positions had resulted from length of service in the rail industry environment, experience gained in different organizational formats, having a base professional qualification (in these cases, engineering), and the ability to build on personal opportunities.

In light of this discussion, this study also considered that executive leaders would require further development in global skills, as executive leaders' knowledge and experiences were constrained generally to Australian rail and certain views of leadership within these contexts. Engineering specialists who become leaders have to be aware that they can become set in engineering, or prescriptive, problem-solving paradigms. Therefore, adeptness in global, leadership competencies are now needed to ensure senior rail leaders have a global, inclusive approach to leading others. Considering the changing ownership of rail companies to multinationals, being acquainted with global knowledge and experiences adds to the diverse talents of rail leaders, especially as companies move from an industrial to a knowledge base.

Middle leaders provided a different picture of how they had arrived at their own leadership role. A wise mentor or guiding hand had aided promotion to a middle level role that allowed them to develop experience on the job. Only one middle level leader had a formal qualification. In this scenario, talented team players became organized frontline leaders who then became personable, middle level leaders. As a result of lower levels of formal learning, their ability to recognize learning and leadership development needs in others was limited and based solely on their own experience, performance and understanding as a leader.

Middle level leaders had developed experience predominantly on the job, firstly at the frontline and then promoted upwards. They were selected for their ability to combine operational ability and management skills. In one example, formal learning was spasmodic. This middle level leader had completed an initial short training program, and after more than 20 years, completed another short course. In another company, the middle level leader, started his career as a driver, then became a team leader and, in time, moved to train control over a 20-year journey. In another, the middle level leader had worked for the organization 'moving up through the ranks, doing different jobs, different locations' and had "just moved into this role, you might say". They were all without formal qualifications, and were restricted by their consciousness of learning to the vocational education sphere. Many would be unable to transcend to the executive level because of few, formal underpinning skills and qualifications. The lack of formal qualifications impeded their view of the development needs of self, as well as others, limiting their views of leadership development to archetypal approaches such as short courses and workplace experience.

At the frontline level, leaders had followed the pathway from employee to manager where no formal qualifications were required. Typically, they had developed workplace and leadership skills on the job by working their way from the bottom to more responsible positions:

> I've been in the Railways since 1988, and I started as a junior admin officer at a bus depot and just over the years I have just sort of worked my way through the different areas and opportunities came up and I never actually had to apply for any of the positions I have been in. I have always been asked "Do you want to do this? Do you want to do that?" and it's just progressed from there till I have got to this point where I am at now (Frontline leader, Organization C).

While they had vast experience in their roles, they viewed the world through the context of their own reality. Reaching a frontline leadership role came about by moving from an unskilled, manual role to a supervisory role, requiring the ability to provide direction and get things done. Consequently, frontline leaders believed that there was limited leadership potential within their own teams because most employees had been in the organization a long time:

> Usually very easily identified—people in this organization are people who have either been here a long time or come in from outside, and some of them have very strong talents in some areas because they've come from those areas, and some have a bit of a broad talent... (Frontline leader, Organization A).

The widely held view of long-serving leaders at the frontline was that leadership skills were primarily learnt by "getting your hands dirty". There was a widespread view that leadership could not be taught in a course, "I know everyone's had a go at trying to design courses that teach leadership and teach

experience—there's no such thing". The value given to formal learning and development was low and not widely utilized as this leader suggested, "Look, some of our people have undertaken the frontline management courses and that. I must be honest—what the value of those are, I'm not quite sure...". As a result, leadership development at the frontline remained the domain of practical experience.

At another company, the frontline leader was "a product of the old rail system", commencing in the industry in the 1960s. He worked his way up, going through "all the different grades and different areas in the country" before becoming a train controller, and "just progressed through the ranks". At another company, the frontline leader had just progressed from "looking after things" to "looking after people" but admitted he had limited experience in managing people. Recognition of their own and others' development needs was limited by their scant experience of the concept of "learning". Frontline leaders demonstrated a limited worldview, a focus on following rules, traditions, and norms and a relative inability to grasp the relentless rail industry changes. Workplace coping skills included behaviors such as absenteeism at the frontline and ongoing staff rescheduling consequences as a result.

5.5. What Talents Should Now Be Considered as Important for "Good" Leaders in Rail Organizations?

The research approach provide a large volume, and rich sources of information about leadership talent. Interpreting what the three levels of leaders at executive, middle and frontline and the literature described about leadership talent, three sets of talents for each level of leadership were identified. This is shown in Table 2, using concepts from Northouse [27].

Table 2. Areas for Development for Leaders.

	Task	**Human Relations**	**Change and Conceptual**
Executive	Develop performance and behavioural benchmarks for the organisation Use technology to facilitate business, communication and ways of working	Understand personal communication style and impact on others at strategic, team and personal levels Develop skills in "personal" and one-on-one performance conversations Build relationships up and down the organisation Use and endorse contemporary learning approaches to leadership development Actively seek feedback about own performance	Develop an understanding of global rail industry environment and trends and parent company strategy Communicate appropriate messages about company direction for different levels of the organisation
Middle	Gain formal qualifications in either vocational and/or higher education disciplines such as safety, engineering, finance or other to develop career	Develop skills in "personal" and one-on-one performance conversations Discuss personal career aspirations with teams Understand different approaches to developing leaders	Be open to new career experiences and ways of conducting business based on global trends Develop IT skills to facilitate work more efficiently

Table 2. *Cont.*

	Task	Human Relations	Change and Conceptual
Frontline	Develop skills in managing resources and people Participate in formal training to gain a different perspective on how other industries manage and lead people	Develop skills in "personal" and one-on-one performance conversations Discuss personal career aspirations with teams Take time to consider how work impacts people in demanding roles	Take action to remedy issues you have the ability to fix

The first cluster of talents are those from the hard or technical areas that can be learnt, are precise, and can be developed through learning in vocational and professional disciplines such as engineering, business or management. These talents are related to the present time and place as they are related to achieving a task, for example, operational management. The second cluster of talents are the soft or human focused skills required to engage with people, build relationships and communicate successfully. The third set of talents relate to the future, such as abilities for conceptual and strategic thinking and instigating change.

In Figure 2, the different talents are shown by their focus according to each leadership level to demonstrate, for example, that an executive leader role has more focus on the areas of soft skills and strategic thinking whereas at the frontline, leaders need more ability in managing operations.

Figure 2. Three domains of leadership; Source: Katz [41] cited in Northouse [27].

6. Conclusions

This study aimed to explore how leaders at executive, middle and frontline levels in the Australian rail industry understand leadership talent, with the aim of deepening our understanding of the "talents" required for industry leaders into the future. The research questions were addressed by examining the talents admired in other leaders, through self-examination of leader's current roles and by postulating about the talents that should be considered as important for "good" leaders in rail organizations. As a result of this study, four main findings add to our understanding of leadership talent in the Australian rail industry.

Firstly, Australian rail industry organizational structures are typically based on hierarchical models where there are defined levels of leadership at each level. Our study sought to understand the talents required for leaders at each level because the benefit of such structures are that employees are able to develop their leadership career in an industry and organization where there are well articulated

pathways. The study found that global influences and ongoing change have diminished these pathways considerably and affected the ability of employees to move between the different levels. At the executive level, employees have been more mobile and able to build on their professional qualifications and experiences to pursue different opportunities as leaders. At the middle and frontline, many employees have been entrenched in these lower level roles because they are seen as crucial to maintaining rail operations on a day to day basis when there is continuous change. Through lack of opportunity or lack of interest, not achieving a formal qualification and striving to experience different roles in the workplace, has confined many middle and frontline leaders to lifelong leadership careers at these levels.

Secondly, different skills are required at the different leadership levels which became obvious through this study. Defining the leadership talents required at each level is recognised as a sound strategy that can provide a roadmap for pathways to future leadership careers in rail. At the executive level, leaders demonstrated strong technical expertise and formal qualifications and experience that contributed to their ability to transcend to different roles. However, the Australian rail industry has changed dramatically over the last 40 years ago with the reality that globalisation is influencing all rail ecosystems and driving new missions of commercial success. Leadership talent at senior levels of rail organizations requires leaders to meet these changing business paradigms head on and coordinate the traditional community of rail within. Skills now required for executive leaders highlight that soft skills such as communication skills, enabling others, collaboration and strategies for accountability and performance are crucial for success. Many employees at the middle and frontline levels were not able to understand new industry directions, holding onto past practices from the "traditional" rail culture. Executive leaders have a role to play in defining the new skills and behaviours required of leaders in their organizations and enabling those in leadership roles below to develop those skills, behaviours and competencies.

Thirdly, our study recognised that leadership talents can be developed further to make better leaders for the rail industry. Executive leaders would benefit from development in self-awareness to understand their impact of leadership on others, global talents for working in an international environment, communication and relationship building skills. Middle level leaders would benefit from pursuing formal qualifications in a rail related, financial or engineering discipline to pave the pathway to higher level roles. They would also benefit from developing talents in communication and strategies for diagnosing learning and development needs of other leaders within the organization. At the frontline, leaders would benefit from formal qualifications in managing people and resources at the operational levels. The biggest gains could be made by developing the foundation skills of management and leadership at the frontline where more than 73 percent of leaders are employed.

Fourthly, the importance of the soft skills of leadership are undervalued and need to be developed further across the board. Our study identified that leaders in rail interchanged the term leadership with management, and vice versa, and so a wide understanding of the value of "good" leadership or leadership talent was unknown. However, when individual leaders at all levels were asked to describe their vision of a "good" leader, remarkably similar characteristics emerged about human or personal abilities necessary to engage various groups. These characteristics included personal communication, personal values and time for all people, amongst the long list of "people-focused" attributes. Connections had not been made between leadership talent, business performance and competitive advantage because there was such a focus on engineering and technical expertise and ability.

As a result of the research, a summary of the three domain areas of leadership is included that relate to the leadership levels.

The sustainability of leadership practice for the next era of Australian rail requires the development of leadership talent to meet these challenges. One of the greatest areas for development of all rail leaders was the need for the recognition of the softer side of being a leader. A strong focus on engineering, technical expertise, safety and compliance weighted leadership in the minds of current leaders to the hard domains, but this study uncovered the unmet needs of people in rail in being recognized and supported in their daily work. The equal balance found in the original meaning of "talent" (when the world was more straightforward), identified that both hard and soft skills are required now in combination to manage resources and lead people. As complexity increases in the workplace, talented rail leaders have a key role to play in ensuring individuals are keeping pace with these demands. The leadership role in rail now requires one-on-one time with individual team members to monitor and support work progress and individual development. This is especially important considering the impact and meaning of work and life balance, where people are staying in the workforce for longer periods.

The advancement of knowledge about the talents required for all levels of rail leaders has been the subject of this study, which set out to explore how individual leaders are identified and developed in Australian rail organizations. To add to the initial findings, undertaking further research in other rail companies would develop further knowledge about the underexplored areas relate to the "soft" talents of leadership including what skills staff believe are necessary for good leadership.

Conflicts of Interest

The author declares no conflict of interest.

References

1. CRC for Rail Innovation. "Welcome to the CRC for Rail Innovation." Available online: http://www.railcrc.net.au/ (accessed on 2 February 2013).
2. Australasian Railway Association Inc. *A Rail Revolution: Future Capability Identification and Skills Development for the Australasian Rail Industry*. Kingston: Australasian Railway Association, 2008.
3. Wallace, Michelle, Ian Lings, Neroli Sheldon, and Roslyn Cameron. "Attraction and image for the australian rail industry." Paper presented at British Academy of Management Conference, Sheffield, UK, 14–16 September 2010.
4. Mahendran, Anusha, Alfred Michael Dockery, and Fred Affleck. *Forecasting Rail Workforce Needs: A Long-Term Perspective*. Perth: Centre for Labour Market Research, 2007.
5. Brennan, Tim, Nick Wills-Johnson, Paul Larsen, Anusha Mahendran, Brett Hughes, and Jian Wang. "The business of australia's railways: Proceedings from the australian railways business and economics conference." In Proceedings of Australian Railways Business and Economics Conference, Australia, 20 July 2009. Edited by Nick Wills-Johnson. Perth: Centre for Research in Applied Economics, 2009.
6. Pricewaterhouse Coopers (PWC). *The Changing Face of Rail: A Journey to the Employer of Choice*. Canberra: Australasian Railway Association (ARA) Inc., 2006.
7. Agarwal, Renu, and Roy Green. "The role of educational skills in australian management practice and productivity." In *Fostering Enterprise: The Innovation and Skills Nexus—Research Readings*.

Edited by Penelope Curtin, John Stanwick and Francesca Beddie. Adelaide: National Centre for Vocational Education Research, 2011.

8. Chambers, Elizabeth G., Mark Foulon, Helen Handfield-Jones, Steven M. Hankin, and Edward G. Michaels. "The war for talent." *The McKinsey Quarterly* 3 (1998): 44–57.

9. Michaels, Ed, Helen Handfield-Jones, and Beth Axelrod. *The War for Talent.* Boston: Harvard Business School Press, 2001.

10. Boudreau, John W., Peter M. Ramstad, and Peter J. Dowling. "Global talentship: Toward a decision science connecting talent to global strategic success." *Advances in Global Leadership* 3 (2003): 63–99.

11. Busine, Mark, and Bruce Watt. "Succession management: Trends and current practice." *Asia Pacific Journal of Human Resources* 43 (2005): 225–37.

12. Garavan, Thomas N., Ronan Carbery, and Andrew Rock. "Mapping talent development: Definition, scope and architecture." *European Journal of Training and Development* 36 (2012): 5–24.

13. Scullion, Hugh, and David Collings. "Global talent management." *Journal of World Business* 45 (2010): 105–8.

14. Sheehan, Maura. "Developing managerial talent: Exploring the link between management talent and perceived performance in multinational corporations (mncs)." *European Journal of Training and Development* 36 (2012): 66–85.

15. Swanson, Richard A., and Elwood F. Holton. *Foundations of Human Resource Development*, 2nd ed. San Francisco: Berrett-Koehler, 2009.

16. Clardy, Alan. "The strategic role of human resource development in managing core competencies." *Human Resource Development International* 11 (2008): 183–97.

17. Tansley, Carole. "What do we mean by the term 'talent' in talent management?" *Industrial and Commercial Training* 43 (2011): 266–74.

18. Boyatzis, Richard E. "Competencies in the 21st century." *Journal of Management Development* 27 (2008): 5–12.

19. Boyatzis, Richard E. "Managerial and leadership competencies." *Vision: The Journal of Business Perspective* 15 (2011): 91–100.

20. Kegan, Robert, and Lisa Lahey. *Immunity to Change: How to Overcome It and Unlock Potential in Yourself and Your Organization.* Cambridge: Harvard Business Press, 2009, pp. xvii, 340.

21. Kegan, Robert, and Lisa Lahey. "Adult development and organisational leadership." In *Handbook of Leadership Theory and Practice: An Harvard Business School (hbs) Centennial Colloquium on Advancing Leadership.* Edited by Nitin Nohria and Rakesh Khurana. Boston: Harvard Business School Publishing, 2010.

22. Smart, Bradford D. *Topgrading: How Leading Companies Win by Hiring, Coaching, and Keeping the Best People.* Paramus: Prentice Hall Press, 1999, pp. xi, 403.

23. McDonnell, Anthony. "Still fighting the 'war for talent'? Bridging the science versus practice gap." *Journal of Business and Psychology* 26 (2011): 169–73.

24. Aguinis, Herman, Ryan K. Gottfredson, and Harry Joo. "Using performance management to win the talent war." *Business Horizons* 55 (2012): 609–16.

25. Stahl, Günter, Ingmar Björkman, Elaine Farndale, Shad S. Morris, Jaap Paauwe, Philip Stiles, Jonathan Trevor, and Patrick Wright. "Six principles of effective global talent management." *MIT Sloan Management Review* 53 (2012): 25–32.

26. Thompson, Charles, and Jane Brodie Gregory. "Managing millennials: A framework for improving attraction, motivation, and retention." *Psychologist-Manager Journal* 15 (2012): 237–46.

27. Northouse, Peter G. *Leadership: Theory and practice,* 5th ed. Thousand Oaks: Sage Publications Ltd., 2010.

28. Bass, Bernard M., and Ruth Bass. *The Bass Handbook of Leadership: Theory, Research, and Managerial Applications.* New York: The Free Press, 2008.

29. Grint, Keith. "A history of leadership." In *The Sage Handbook of Leadership.* Thousand Oaks: Sage Publications Ltd., 2011, pp. 3–14.

30. Papalexandris, Nancy, and Eleanna Galanaki. "Connecting desired leadership styles with ancient greek philosophy: Results from the globe research in greece, 1995–2010." In *Leadership through the Classics.* Berlin: Springer, 2012, pp. 339–50.

31. Carlyle, Thomas. *On Heroes, Hero-Worship, and the Heroic in History.* Berkeley: University of California Press, 1993, vol. 1.

32. Galton, Francis. *Hereditary Genius.* New York: Appleton, 1869.

33. Taylor, Frederick Winslow. *The Principles of Scientific Management.* New York: Norton, 1911.

34. Blake, Robert R., Jane S. Mouton, and Alvin C. Bidwell. *The Managerial Grid.* Houston: Gulf, 1964.

35. Fiedler, Fred Edward, and Martin M. Chemers. *A Theory of Leadership Effectiveness.* New York: McGraw-Hill, 1967.

36. Burns, James M. *Leadership.* New York: Harper & Row, 1978.

37. Kouzes, James M., and Barry Z. Posner. *The Leadership Challenge—How to Get Extraordinary Things Done in Organisations.* San Francisco: Jossey-Bass, 1987.

38. Uhl-Bien, Mary, Russ Marion, and Bill McKelvey. "Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era." *The Leadership Quarterly* 18 (2007): 298–318.

39. Snee, Ronald D., and Roger W. Hoerl. "Leadership—Essential for developing the discipline of statistical engineering." *Quality Engineering* 24 (2012): 162–70.

40. Mumford, Troy V., Michael A. Campion, and Frederick P. Morgeson. "The leadership skills strataplex: Leadership skill requirements across organizational levels." *The Leadership Quarterly* 18 (2007): 154–66.

41. Katz, Robert Lee. "Skills of an effective administrator." *Harvard Business Review* 33 (1955): 33–42.

42. Mumford, Michael D., Stephen J. Zaccaro, Mary Shane Connelly, and Michelle A. Marks. "Leadership skills: Conclusions and future directions." *The Leadership Quarterly* 11 (2000): 155–70.

43. Eichinger, Robert W., and Michael M. Lombardo. "Learning agility as a prime indicator of potential." *People and Strategy* 27 (2004): 12–15.

44. Morris, Linda E., and Christine R. Williams. "A behavioral framework for highly effective technical executives." *Team Performance Management* 18 (2012): 210–30.

45. Clarke, Nicholas. "Model of complexity leadership development." *Human Resource Development International* 16 (2013): 135–50.

46. Boedker, Christine, Richard Vidgen, Kieron Meagher, Julie Cogin, Jan Mouritsen, and Mark Runnalls. *Leadership, Culture and Management Practices of High Performing Workplaces in Australia: Literature Review and Firm Diagnostics.* Sydney: The Society for Knowledge Economics, 2011.

47. Lyotard, Jean-François. *Postmodern Condition: A Report on Knowledge.* Minnesota: University of Minnesota Press, 1984, vol. 10.

48. Handy, Charles B. *Beyond Certainty: The Changing Worlds of Organizations*. Boston: Harvard Business School Press, 1996.

49. Ashton, David, Phillip Brown, and Hugh Lauder. *Education, Globalisation and the Knowledge Economy (Teaching and Learning Research Programme)*. London: University of London, 2008.

50. Castells, Manuel. *The Rise of the Network Society: The Information Age: Economy, Society, and Culture*. West Sussex: John Wiley & Sons, 2011, vol. 1.

51. Dries, Nicky. "The meaning of career success." *Career Development International* 16 (2011): 364–84.

52. Tarique, Ibraiz, and Randall S. Schuler. "Global talent management: Literature review, integrative framework and suggestions for further research." *Journal of World Business* 45 (2010): 122–33.

53. Toffler, Alvin. *The Third Wave*. New York: Bantam Books, 1980.

54. Silzer, Rob, and Allan H. Church. "The pearls and perils of identifying potential." *Industrial and Organizational Psychology* 2 (2009): 377–412.

55. Yukl, Gary, Angela Gordon, and Tom Taber. "A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research." *Journal of Leadership & Organizational Studies* 9 (2002): 15–32.

56. Hooijberg, Robert, James G. Jerry Hunt, and George E. Dodge. "Leadership complexity and development of the leaderplex model." *Journal of Management* 23 (1997): 375–408.

57. Boyce, Lisa A., Stephen J. Zaccaro, and Michelle Zazanis Wisecarver. "Propensity for self-development of leadership attributes: Understanding, predicting, and supporting performance of leader self-development." *The Leadership Quarterly* 21 (2010): 159–78.

58. Swailes, Stephen. "The ethics of talent management." *Business Ethics: A European Review* 22 (2013): 32–46.

59. Howe, Michael J.A., Jane W. Davidson, and John A. Sloboda. "Innate talents: Reality or myth." *Behavioural and Brain Sciences* 21 (1998): 399–442.

60. Ibarra, Herminia, Scott Snook, and Laura Guillen Ramo. "Identity-based leader development." In *Handbook of Leadership Theory and Practice*. Edited by Nitin Nohria and Rakesh Khurana. Boston: Harvard Business Press, 2010, p. 674.

61. Houck, Christiana. "Multigenerational and virtual: How do we build a mentoring program for today." *Performance Improvement* 50 (2011): 25–30.

62. Piaget, Jean. *Biology and Knowledge: An Essay on the Relations between Organic Regulations and Cognitive Processes*. Translated by Beatrix Walsh. Chicago: University of Chicago Press, 1971, pp. xii, 384.

63. Piaget, Jean. *The Origin of Intelligence in the Child*. London: Routledge & Kegan Paul, 1953, pp. xi, 425.

64. Kegan, Robert. *The Evolving Self: Problem and Process in Human Development*. Cambridge: Harvard University Press, 1982.

65. Kegan, Robert. *In Over Our Heads: The Mental Demands of Modern Life*. Cambridge: Harvard University Press, 1994.

66. Eriksen, Karen. "The constructive developmental theory of robert kegan." *The Family Journal* 14 (2006): 290–98.

67. Traylor, Jessica. "Robert kegan's constructive-developmental theory—Orders of consciousness." Available online: http://www.slideshare.net/JessicaTraylor/kegan-constructive-developmental-theory (accessed on 14 March 2012).

68. Chandler, Dawn E., and Kathy E. Kram. "Applying an adult development perspective to developmental networks." *Career Development International* 10 (2005): 548–66.

69. McGonagill, Grady, and Peter W. Pruyn. "Leadership Development in the US: Principles and Patterns of Best Practice." Available online: http://www.bertelsmann-stiftung.de/cps/rde/xbcr/SID-7F606111-03CADE44/bst/Bertelsmann%20Foundation-%20Leadership%20Development%20in%20the%20US%20-%20Principles%20and%20Patterns%20of%20Best%20Practice.pdf (accessed on 15 September 2011).

70. Day, David V., Michelle M. Harrison, and Stanley M. Halpin. *An Integrative Approach to Leader Development: Connecting Adult Development, Identity, and Expertise*. London: Routledge, 2009.

71. Lave, Jean, and Etienne Wenger. *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press, 1991.

72. Day, David V., and Michelle M. Harrison. "A multilevel, identity-based approach to leadership development." *Human Resource Management Review* 17 (2007): 360–73.

73. Orazi, Davide, Laura Good, Mulyadi Robin, Brigid van Wanrooy, Ivan Butar, Jesse Olsen, and Peter Gahan. *Workplace Leadership: A Review of Prior Research*. Melbourne: Centre for Workplace Leadership, 2014.

74. Short, Tom W., Janene K. Piip., Tom Stehlik, and Karen Becker. *A Capability Framework for Rail Leadership and Management Development*. Brisbane: CRC for Rail Innovation, 2011.

75. Myers, Michael D. *Qualitative Research in Business and Management*. London: Sage Publications, 2009.

76. Maxwell, Joseph A. *Qualitative Research Design: An Interactive Approach*, 2nd ed. Thousand Oaks: Sage Publications Ltd., 2005.

77. Thompson, Kirrilly. "Qualitative research rules: Using qualitative and ethnographic methods to access the human dimensions of technology." In *Evaluation of Rail Technology: A Practical Human Factors Guide*. Edited by Anjum Naweed, Jillian Dorrian, Janette Rose, Drew Dawson and Chris Bearman. Farnham: Ashgate Publishing, Ltd., 2013, pp. 75–110.

78. Creswell, John W. *Qualitative Inquiry and Research Design: Choosing among the Five Approaches*. Thousand Oaks: Sage Publications Ltd., 2007.

79. Cohen, Deborah, and Benjamin Crabtree. "Qualitative research guidelines project." July 2006. Available online: http://qualres.org/index.html (accessed on 1 January 2010).

80. Berger, Peter L., and Thomas Luckmann. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Garden City: Doubleday, 1966, pp. x, 219.

81. Clardy, Alan. *Studying Your Workforce: Applied Research Methods and Tools for Training and Development Practitioners*. Thousand Oaks: Sage Publications, 1997.

82. Yin, Robert K. *Case Study Research: Design and Methods*, 3rd ed. Thousand Oaks: Sage Publications, 2003.

83. Angen, Maureen Jane. "Evaluating interpretive enquiry: Reviewing the validity debate and opening the dialogue." *Qualitative Health Research* 10 (2000): 378–95.