We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900
Open access books available

185,000
International authors and editors

200M
Downloads

Our authors are among the

154
Countries delivered to

TOP 1%
most cited scientists

12.2%
Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com



Chapter 7

The Role of Leadership in the Professional Development of Subordinates

Luciana Mourão

Additional information is available at the end of the chapter

http://dx.doi.org/10.5772/intechopen.76056

Abstract

Professional development is relevant for the workers themselves, for the organizations, and, in a more macro view, also for the countries. In this sense, this chapter aims to discuss the influence of leadership in the professional development of subordinates, pointing out the importance of leadership performance. To achieve this goal, research results are presented on the relationship between leadership and professional development of subordinates. Research in the field shows that professional development is directly related to the day-to-day activities of workers and should be part of a broader process of continuous learning, which results both from formal and informal learning actions. The debate proposed for this chapter considers that professional development is more directly related to the combination of cognitive, affective, and behavioral processes that involve learning than the specific results of certain formal or informal learning actions. Thus, we discuss how the relations established with the leadership in the work environment can influence the professional development of the subordinates besides the type of learning provided to the workers. This discussion can shift the focus of research—currently centered on learning modes—to a focus on leadership practices for skills development and the consequent career progression of subordinates.

Keywords: career progression, leadership, learning at work, professional development, support, subordinates

1. Introduction

At the end of the twentieth century, it was estimated that organizations in the United States spent about $55–200 billion annually on workforce training [1]. This high investment in actions

IntechOpen

© 2018 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. CC BY

leading to professional development has also driven the demand for scientific research to better understand learning processes at work in the twenty-first century [2].

A study conducted in the United States with some of the largest US companies numbering 264 shows that most CEOs (62%) believe that building and maintaining a skilled workforce is the most important challenge of the decade [3]. Although this research was done at the beginning of this century, this challenge of developing and maintaining a properly qualified workforce is still present not only for American organizations but also as a global challenge. In Europe, the countries with the highest investment per employee are Denmark, Sweden, the Netherlands, France, Finland, and Ireland [4].

In Brazil, a survey of 1150 organizations (public, private, and third sector) identified that 42% of organizations invest in training actions within or outside the workplace [5]. Large organizations with more than 100 employees, more than 20 years in the market, and located in the most developed regions of the country, correspond to the profile that offers more qualification opportunities to their workers. These results allow an association between the growth of the organization and the level of investment in the professional development of the employees.

In the same vein, the study of [4] identifies a pattern in European countries where there is a greater percentage of people trained in organizations with more than 250 employees than in organizations between 10 and 50 employees. And in Poland, research has confirmed that smaller firms are particularly reluctant to train their workers [3]. In the survey conducted by [6], with 1992 small- and medium-sized companies, researchers found that only one-sixth of the organizations surveyed conducted training planning. In addition, a small proportion of such organizations have a specific budget for training actions. These results suggest, therefore, that investing in more visionary leadership and leadership focused on organizational growth can be useful in shifting the value attributed to the professional development of the workforce of companies.

In this chapter, we discuss the influence of leadership in the professional development of subordinates, pointing out the importance of leadership performance. The prioritization of context variables (the role of leadership) finds support in literature reviews that point to such need, indicating the importance of expanding research for environmental variables [7, 8]. The relevance of contextual variables is also evident in studies on work design, recognized as a mediator of variables such as leadership, production, time reduction, task elaboration, and work contracts [9].

In addition, there is a growing concern that people management policies are aligned with the organizational strategy and value their employees. The leaders need to invest also in the devel opment of collective competencies, which are anchored in the context. Therefore, the performance of the leader can be of great relevance for the professional development of the subordinates, since the leadership can establish strategies of qualification, as well as create a favorable environment for learning. But this is a two-way street, since analyzing lists of the characteristics of effective professional development is an important strategy to promote visionary leadership [10] or transformational leadership too.

Thus, this chapter discusses the role of leadership in the professional development of subordinates, signaling different ways for leadership to contribute to the qualification of work

http://dx.doi.org/10.5772/intechopen.76056

teams. To this end, the chapter was organized into four sections. The first section presents the main concepts and processes related to professional development. The second section turns to leadership, with a brief presentation of the concept and theories in this field. The following section lists these two variables—leadership and professional development—discussing how leaders can contribute to the growth of subordinates. Finally, the conclusions are presented with a summary of their content and the proposal of future research on the subject.

2. Professional development

Professional development is directly related to the day-to-day activities of workers and should be part of a broader process of continuous learning [10]. Professional development corresponds to the growth and maturation of the knowledge, skills, and attitudes acquired throughout the workers' lives, as a result of formal and informal actions of learning at work [8, 11].

The literature indicates the relationship between formal training, learning at work, and everyday learning [12, 13]. Therefore, different forms of formal and informal learning at work are related to the development of human capital [2], and they are seen as complementary. The professional development process also involves the experiences and personal experiences that characterize the learning throughout the career [14].

Thus, we can consider that professional development is supported by the Kolb's Experiential Learning Theory [15], characterized by a holistic perspective that combines experience, perception, cognition, and behavior. According to this theory, learning is the process by which knowledge is created through the transformation of experience into a cyclical model of learning, based on four successive stages: concrete experience, reflexive observation, abstract conceptualization, and active experimentation.

According to [15], the four stages of the learning cycle consider that experience is constructed by processes of intention, extension, apprehension, and understanding. In the logic of this model, concrete experiences impel an intentional reflexive action, transforming into an abstract conceptualization, which allows the experience of active experimentation. Thus, the process of professional development involves experience, observation, reflection, and transformation.

Professional development is thus composed of a series of events and activities related to a particular profession, creating or developing sets of skills, knowledge, and attitudes in the areas of people's performance [16]. In this sense, the focus of the concept of professional development is on a combination of cognitive, affective, and behavioral processes, involving formal and informal learning strategies throughout the career.

Therefore, although in the Anglo-Saxon literature the concept of professional development is used, mainly to designate the activities of induced learning [17], a broader concept understands that it is a natural consequence of the different kinds of learning at work. In this broader view of the professional development process, it stems from formal or informal learning actions [18], being directly related to career progression [11]. Thus, the concept of professional development

encompasses a variety of practices, such as: activities in scientific societies [19]; training processes, including acting as supervisor, coach, or leader (mentoring and monitoring of actions to students, subordinates, or new professionals) [20]; training and strategies for systematized and informal learning for skills development [16, 21, 22]; in-service training [5, 23]; participation in communities of practice [24, 25]; participation in processes of continuous professional development [5, 26]; peer collaboration mediated by technological resources [27, 28]; mentoring programs [29]; and specific leadership development programs [10, 30].

But if, on the one hand, it makes sense to say that professional development derives from formal and informal learning-at-work actions, on the other hand, the antagonistic view of these two terms has been questioned, since it is an artificial polarization. In this chapter, we do not seek to separate such concepts or assign greater relevance to one or the other. We consider that both formal and informal learning can contribute to professional development, despite formal learning, in general, receives more emphasis in the literature [8, 31].

It is important to consider that the learning in the work stems from different actions and situations, and several of them involve reflection processes of the worker. A study [32], with a wide variety of occupations and organizational contexts, showed that learning strategies contribute to professional development. The results of such research show that strategies for learning intrinsic and extrinsic reflection, seeking help from others and learning by trial and error are predictors of the perception of professional development. In addition, the trial-and-error learning strategy is moderated by work experience. The study also concluded that hours of training, seeking help from others, and educational level are predictors of perceived professional development.

The literature confirms, therefore, that the learning at work is influenced by the systematic actions of training and development, of the social interaction and the experiential learning. For this reason, the learning-at-work model [33] is relevant to the study of professional development, since this model takes into account professional practice and addresses dimensions related to the content, incentive, and learning context. The constitutive logic of this model is that the learning at work assumes the character of skills development and stems from the acquisition of technical skills and the interaction between practice and elements of work identity.

Thus, the theoretical framework allows us to point out that professional development involves different kinds of learning [11, 18], and experiential learning can be considered one of its most relevant theoretical foundations. Therefore, we can consider that professional development is based on the theory of experiential learning [15] and more recent theories about learning in the work environment, which simultaneously consider variables of individuals and context [33–35].

This set of learning related to professional development occurs throughout the entire life of the worker, going through different stages. Thus, the strategies that most contribute to career development at the beginning of the career differ from those that contribute to the development of those who are in the stage of career consolidation or who already have a consolidated career. Although different elements—such as contextual elements, individual elements, and

http://dx.doi.org/10.5772/intechopen.76056

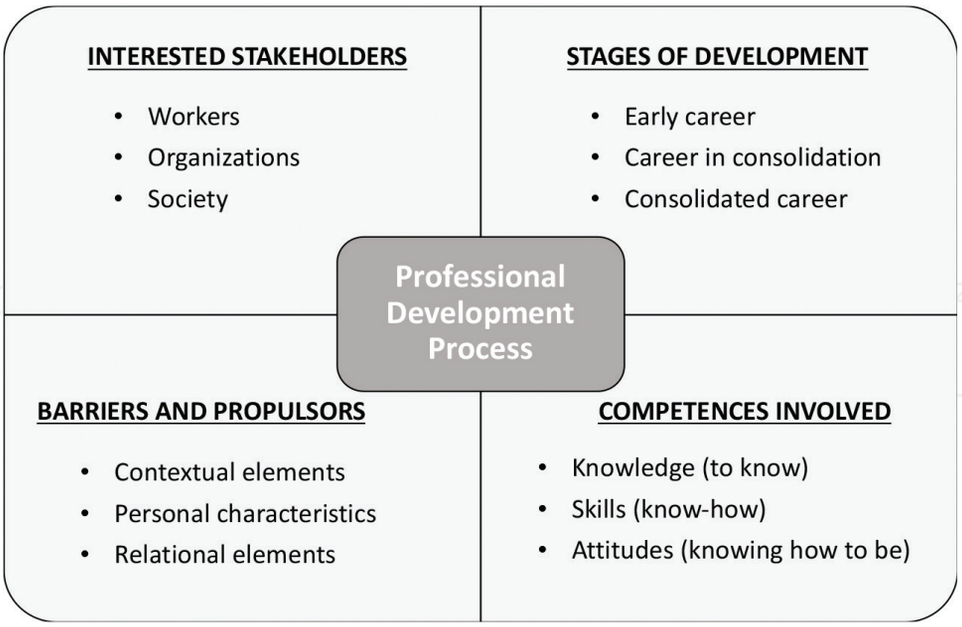


Figure 1. Professional development process.

relational elements—can act as barriers or as drivers of people's professional development process, these elements have a different action throughout the career stages [15].

Professional development is therefore associated with the acquisition and development of competences involving cognitive, affective, and psychomotor processes. As a result, there are constant changes in terms of Knowledge (to know), Skills (know-how), and Attitudes (knowing how to be) [36]. It must also be considered that the process of professional development involves different stakeholders (workers, organizations, and society) and can be driven (pusher) or braked (barriers) by a set of contextual elements (job opportunities, type of organization, support received from peers and managers, characteristics of the socioeconomic environment, etc.), individual elements (initiative, dynamism, courage to risk, determination, resilience, etc.), or relational elements (network, work teams, etc.) [33]. **Figure 1** summarizes different aspects related to the professional development process.

In addition to different types of learning, the process of professional development may also be distinct for the professions. In this sense, it is necessary to understand that, besides the career phases and the individual characteristics, other variables—such as the professional formation—can influence the development process of the people.

Therefore, a contribution of the leaders to the professional development of their subordinates needs to take into account the individual characteristics of each one. Probably the actions that will contribute to the professional development of a doctor are not the same as those that will contribute to the development of an engineer or a lawyer. Leadership has a challenge of identifying the most relevant elements for each of their subordinates. Some leadership styles can provide support for this kind of action focusing on the individuals and the characteristics of each one, as we see in the next section.

3. Leadership

The interest in the topic of leadership has been renewed with an expressive set of studies that correlate leadership to the most diverse themes, as they show frequent meta-analysis [37–40]. Leadership has an effect on the organization's performance, on the processes of change, on the commitment, satisfaction, and well-being of employees. Leadership theories began in the theory of traits, and successive other theories were being developed, such as behavioral theories, contingency or situational theories, and procedural theories [41]. A review of the main theories about the phenomenon (from trace-based theory to procedural theories, which are predominant in current research) can be found in [41].

This diversity of theories has led to many styles of leadership and a varied nomenclature, for example, charismatic/bureaucratic leadership [42], transactional/transformational leadership [43, 44], autocratic/democratic/visionary-inspirational leadership/laissez-faire [45, 46], supportive leadership [47], ethical leadership [48], Leader-Member Exchange (LMX) [49]. Each of these styles has specific characteristics, although some styles are derived from others.

This variety of theories and styles is also accompanied by a set of definitions for leadership. But in spite of this conceptual plurality, the process of influence and the involvement of people are often frequent in definitions of leadership. Thus, we consider as a parameter the definition of [50]: leadership is a complex and multifaceted construct that influences organizational tasks, strategies, and cultures, as well as the commitment and identification of teams.

This definition of [50] focuses on the process of influence and interaction of leadership that is also present in the perspective of [51, 52] in terms of the transformation of the leader, from processes of change based on learning and knowledge. In this sense, although the current leadership theories are very focused on the processes [53], such processes include the exchanges between leaders and subordinates, being more prevalent the more integrative approaches of leadership theories [54, 55].

Thus, leadership can be characterized as a process of social influence, since it establishes the relationship between groups of people around individual, group, or institutional goals [56]. Therefore, leadership involves influencing other people's attitudes, beliefs, behaviors, and feelings toward achieving a goal in a given situation [56, 57]. In a similar vein, authors like [58] point out that the main components of leadership are interpersonal influence, leadership in a situation, communication process, and achievement of goals. These goals can be from the organization, the group, the follower, and/or the leader. In this sense, the leader would influence the subordinate's behavior through communication.

Among the various leadership styles, the so-called visionary leadership and transformational leadership [52] are the ones that make the greatest contribution to highlighting the role of leaders in the professional development of subordinates. The concept of visionary leadership involves strategic management in a process of interaction of repetition, representation, and assistance. According to the process, content, and context, there are various types of visionary leadership: the creator—product focus; the proselytizer—market focus; the idealist—ideal focus; the bricoleur—product and organization focus; and the diviner—service focus [59]. The

kind of visionary leader associated with the professional development of subordinates is the diviner, whose target group is the employees and whose salient capacities are insight, sagacity, and inspiration.

Visionary leadership has been defined as a process with three specific steps: (1) vision (idea), (2) communication (word), and (3) empowerment (action). An alternative image of visionary leadership might be that of a drama with action and communication occurring simultaneously. So, the visionary leaders act as follow: repetition (idea), representation (vision), and assistance (emotion and action) [59]. So, the visionary leaders act as follows: repetition (idea), representation (vision), and assistance (emotion and action). By repeating an idea, creating the representation of a certain vision for the future, and acting in an inspiring way for the subordinates, simultaneously in terms of emotion and action, the visionary leader creates an environment conducive to professional development. More specifically, it has been argued that visionary leaders mobilize follower action by linking organizational goals and activities with followers' self-concept and value hierarchies, as well as by connecting followers to the collective such that their interests become fused with those of the organization [60, 61]. The importance of leader vision communication is pointed in both visionary leadership and transformational leadership theories [61].

Thus, the transformational leader also has great ability to contribute to the professional development of his subordinates. The leader acts in the creation of shared goals and encourages the experimentation of solutions, making concessions of power and maintaining a systemic communication that leads to collective engagement. The transformational leader therefore acts in different types of management, namely: attention management, meaning management, trust management, and management of the individual. Each of these dimensions is associated with one of the four Bass' dimensions [43]—Charisma, Inspiration, Intellectual stimulation, and Individual consideration—as shown in **Table 1**.

Management focus	Expected action of the leader	Bass' dimension	Evidence of dimension
Attention management	Express your goals with clarity of purpose	Charisma	Respect for the leader who wants to be imitated and generates high levels of expectation in his subordinates
Meaning management	Develop effective communication of your ideas	Inspiration	The degree to which the leader energizes the subordinates by providing a vision of the future, goals, and purpose
Trust management	Maintain a constancy of purpose	Intellectual stimulation	Leader actions related to intellectual stimulation for subordinates solve problems, challenges, and obstacles in a creative way
Management of the individual	Seek to know each individual and develop their virtues	Individual consideration	The support provided to followers, paying attention to their personal development needs

Table 1. Expected actions of a transformational leader according to its four dimensions.

Thus, in the logic of the transformational leader, there is collective engagement around shared goals. This favors professional development because subordinates feel the importance of their participation in building something meaningful, which increases individual commitment.

4. Leadership and professional development of subordinates

The link between leadership styles and subordinate professional development concepts is supported by different theories of literature. On the one hand, studies in the area of learning at work indicate that social support—received from the manager and co-workers—has relevance for the transference of learning to work [36]. On the other hand, the concept of knowledge management associates the performance of management with the development of the intellectual capital of companies. Thus, [62] defines knowledge management as the process of embracing knowledge as a strategic asset to boost sustainable business advantage and promote an approach to identify, capture, evaluate, improve, and share its intellectual capital.

Thus, the emphasis on knowledge management was directed to the level of work teams [28]. The actions of leaders, team members, and the organization as a whole act as catalysts for knowledge management. Leadership performance is, therefore, a potentiating element in the generation, development, and sharing of knowledge in teams. In this way, the leadership that encourages a culture oriented to learning, innovation, and open communication contributes to dynamize the processes of professional development of subordinates [63]. Thus, a leadership style oriented toward learning and knowledge encourages innovation and the sharing of knowledge, encouraging open communication and team development [64].

In addition, social interaction and the leader's ability to influence subordinates are considered key elements in leadership theories [43, 50]. In this sense, a transformational style of leadership—aimed at the positive influence of subordinates—would be directly associated with the processes of professional and personal development of subordinates [52]. But what elements of transformational leadership would be present in this process of favoring the development of team members? Could supportive leadership and developmental leadership contribute to such a process?

On the one hand, the supportive leadership is one that provides emotional, informational, instrumental, and appraisal support to followers [47], emphasizing the emotional support, which involves the provision of sympathy, evidence of liking, caring, and listening. So, supportive leadership is associated with leaders who express concern for, and take account of, followers' needs and preferences when making decisions.

On the other hand, developmental leadership is associated with individualized consideration, one of the most important dimensions of the transformational leadership. This point involves behaviors identified in the mentoring literature, such as career counseling, careful observation of staff, recording followers' progress, and encouraging followers to attend technical courses [33].

Both developmental leadership and supportive leadership have effects of professional development of subordinates, but the effects are not equal. Developmental leadership displayed stronger relationships with job satisfaction, career certainty, affective commitment to the

organization, and role breadth self-efficacy than did supportive leadership [65]. In this sense, investing in developmental leadership can bring better results for the professional development of work team members.

But beyond understanding what leadership style can be most effective for the professional development of subordinates, it is also important to know how leaders can contribute to this development process. Considering that professional development depends essentially on formal and informal actions of learning at work, it is important that leadership stimulates these two areas. From the point of view of formal learning actions, there has been an investment in corporate universities that fulfill the function of establishing a theoretical and methodological reference for the educational practice, defining the vision of the professional wanted in the organization and the pedagogical guideline of educational actions to be developed [66]. In this sense, leaders can provide learning opportunities for workers through a broad set of training and development actions, including preparation for new positions in the future.

And in addition to formal workplace education, the leaders also can stimulate the informal learning with actions that are non-systematized, spontaneous, and natural [67]. Literature in the area of learning in organizations supports the theoretical premise that the psychosocial support of peers and bosses to the use of new skills and innovation in individuals' work routines is an important variable to support natural learning in organizations [33]. In this sense, leaders can foster a learning culture as a gradual, cumulative, and ongoing process with structured learning experiences [67, 68].

This is important because it is estimated that 90% of work-based learning comes from informal processes that are outside the curricula of educational programs [69]. In this sense, it is up to the leaders to understand that learning at work can occur from a question answered by a more experienced colleague, through daily observation, or reading the books and documents of the organization. Thus, the leader needs to create a work environment that can be considered a space of continuous production and sharing of collective knowledge, since this type of environment provides an informal learning process parallel to the actions of the training system [10].

So, there are basically three fields in which leaders can act to contribute to the professional development of subordinates. The first involves strategic management and concerns the development of a work environment conducive to learning and commitment [2, 12–14]. This environment should be aligned with people management policies that favor learning paths, error management—with the understanding that they bring learning—and knowledge management. It is important for leaders to understand the importance of investing in systemic communication and technology systems that foster peer collaboration. But probably one of the most important aspects is to have shared goals with the work teams and to carry out empowerment that leads to the commitment of the employees and the perception of each one of their importance in the organization.

The second field of action concerns the encouragement of formal learning actions, and the role of leaders is the intellectual stimulation of the team. Training and development actions [1, 16] may take place in different modalities such as distance education, face-to-face or blended learning, and should aim at preparing for the current positions of subordinates and also for

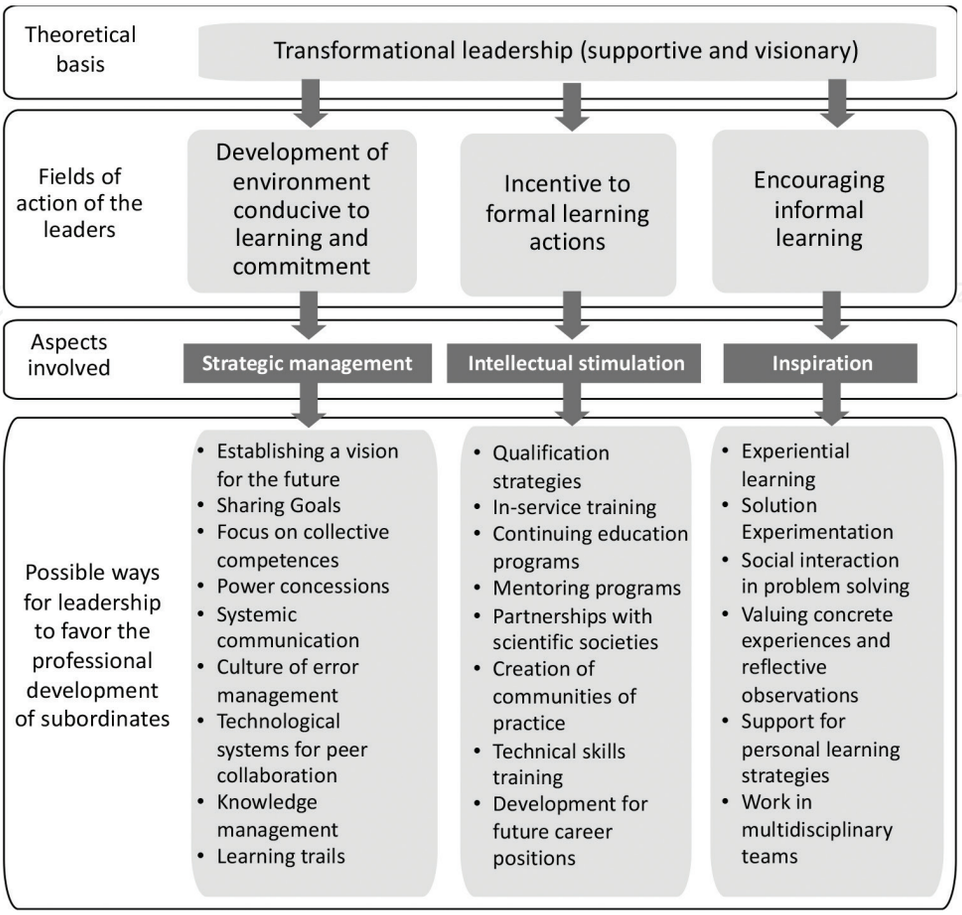


Figure 2. Contributions of leaders to the professional development of subordinates.

future positions that they may occupy in their careers. Qualification strategies should be diversified [5, 33, 36], including in-service training, continuing education programs, and mentoring programs. In addition, it is also valid to create communities of practice and seek to develop partnerships with scientific societies in order to offer constant challenges and growth possibilities for employees.

Finally, the third field of action refers to the encouragement of informal learning [15, 67, 69] for which the leader must inspire subordinates. The promotion of informal learning goes from the establishment of multidisciplinary teams—which enrich the quality of the exchanges in the group—to the valuation of concrete experiences and reflective observation, which characterize experiential learning [15]. It is important in this context that there is an incentive to social interaction and experimentation of solutions, which favor learning. **Figure 2** summarizes the contributions that leaders can make to the professional development of subordinates, pointing out the theoretical bases, the fields of action, and the aspects involved in this process.

5. Conclusion

At present, professional development is an area of growing interest, mainly due to its implicit consequences, such as self-esteem, self-efficacy, motivation, job satisfaction, and employability

[70] the performance of various job duties and responsibilities [23] and the increase it provides in job satisfaction [71]. Thus, such development is relevant to both the workers themselves and the labor and development organizations of the country. As a result, investments in actions aimed at professional development have grown in the international scenario.

As discussed throughout this chapter, professional development should be understood as a construct that goes beyond the mere sum of a set of courses carried out throughout the career because it is a process of maturing the reflexive capacity. So, the most important is not whether professional development comes from formal or informal learning processes. What matters is that such development is characterized as a growing process of awareness and mastery of know-how at work. This is evidenced in different researches that point to reflective practice as an important element for professional development processes [26, 27]. Therefore, in addition to promoting training and development events for specific activities, leaders should encourage a critical and reflective vision in their respective work teams with a deliberately planned direction.

It is also necessary for leaders to understand that the workplace is a complex social system made up of peers who consistently coregulate each other's learning [72]. Thus, if leaders invest in social interactions, they can foster informal learning at work, transforming everyday work practice into a space for the continuous production of collective knowledge.

So, we can conclude that professional development of subordinates is directly connected with leadership style because this development is understood as the growth and maturation of knowledge, skills, and attitudes acquired throughout workers' lives, as a result of learning-at-work actions. And learning-at-work actions depend on leadership decisions.

But while it is important for leaders to act to provide support and development opportunities for their subordinates, care must be taken that leadership does not create unhealthy dependency. Dependence on subordinates constrains their growth and autonomy. Therefore, emerging leadership approaches value the leader's role of coaching roles, with concepts of self-leadership, super leadership, and leadership reinforcement [73]. The challenge posed to the leaders of the twenty-first century, therefore, is to promote and encourage the professional development of their subordinates in a consistent and individual way but without stifling their initiatives and the ability of each one to self-engineer his or her own career.

Author details

Luciana Mourão

Address all correspondence to: mourao.luciana@gmail.com

Salgado de Oliveira University, Niterói, Brazil

References

[1] Salas E, Cannon-Bowers J. The science of training: A decade of progress. Annual Review of Psychology. 2001;**52**:471-499. DOI: 10.1146/annurev.psych.52.1.471

[2] Noe RA, Clarke ADM, Klein HJ. Learning in the twenty-first century workplace. Annual Review of Organizational Psychology and Organizational Behavior. 2014;**1**:245-275. DOI: 10.1146/annurev-orgpsych-031413-091321

[3] Elbadri ANA. Training practices of polish companies: An appraisal and agenda for improvement. Journal of European Industrial Training. 2001;**25**:69-79. DOI: 10.1108/EUM0000000005438

[4] Bassanini A, Booth A, Brunello G, De Paola M, Leuven E. Workplace Training in Europe. 2005. Discussion Paper 1,640. Available at: http://ftp.iza.org/dp1640.pdf

[5] Mourão L. Oportunidades de qualificação profissional no Brasil: Reflexões a partir de um panorama quantitativo. Revista de Administração Contemporânea. 2009;**13**:136-153. Avaiable at: http://www.scielo.br/pdf/rac/v13n1/a09v13n1.pdf

[6] Wong C, Marshall J, Thwaites A. Management training in small and medium-sized enterprises: Methodological and conceptual issues. The International Journal of Human Resource Management. 1997;**8**:44-65. DOI: 10.1080/09585199700000040

[7] Hill HC, Beisiegel M, Jacob R. Professional development research: Consensus, crossroads, and challenges. Educational Researcher. 2013;**42**:476-487. DOI: 10.3102/0013189X13512674

[8] Monteiro ACF, Mourão L. Desenvolvimento profissional: A produção científica nacional e estrangeira. Revista Psicologia Organizações e Trabalho. 2017;**17**:39-45. DOI: 10.17652/rpot/2017.1.12246

[9] Parker SK, Morgeson FP, Johns G. One hundred years of work design research. The Journal of Applied Psychology. 2017;**102**:403-420. DOI: 10.1037/apl0000106

[10] Guskey TR. Analyzing lists of the characteristics of effective professional development to promote visionary leadership. NASSP Bulletin. 2003;**87**:4-17. DOI: 10.1177/019263650308763702

[11] Mourão L, Porto JB, Puente-Palacios KE. Construção e evidências de validade de duas escalas de percepção de desenvolvimento profissional. Psico-USF. 2014;**19**:73-85. DOI: 10.1590/S1413-82712014000100008

[12] Dobos A. Experiential learning for professional development in the civil service. Procedia - Social and Behavioral Sciences. 2014;**116**:5085-5090. DOI: 10.1016/j.sbspro.2014.01.1078

[13] Stewart C. Transforming professional development to professional learning. Journal of Adult Education. 2014;**43**:28-33 Avaiable at: https://search.proquest.com/openview/30e349c8d3e4c79fb9dd52a7186f96fd/1?pq-origsite=gscholar&cbl=28962

[14] Korthagen F. Inconvenient truths about teacher learning: Towards professional development 3.0. Teachers and Teaching. 2017;**23**:387-405. DOI: 10.1080/13540602.2016.1211523

[15] Kolb DA. Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs: Prentice-Hall; 1984. p. 416

[16] Mourão L. Treinamento e Desenvolvimento. In: Bendassolli PF, Borges-Andrade JE, editors. Dicionário de Psicologia do Trabalho e das Organizações. São Paulo: Casa do Psicólogo; 2015. pp. 663-669

[17] Day J. Évaluer la formation continue des enseignants dans le context d'une école en changement en vue de favoriser le développement professionnel des acteurs et d'améliorer leur efficacité? In: Paquay L, editor. L'évaluation des enseignants. Tensions et enjeux. Paris: l'Harmattan; 2004. pp. 87-119

[18] Paquay L, Wouters P, van Nieuwenhoven C. A avaliação, freio ou alavanca do desenvolvimento professional? In: Paquay L, Wouters P, van Nieuwenhoven C, editors. A avaliação como ferramenta do desenvolvimento profissional de educadores. Porto Alegre: Penso; 2012. pp. 13-39

[19] Lauber TB, Taylor EJ, Decker DJ, Knuth BA. Challenges of professional development: Balancing the demands of employers and professions in federal natural resource agencies. Organization Environment. 2010;**23**:446-464. DOI: 10.1177/1086026610387760

[20] Nash JM, Larkin KT. Geometric models of competency development in specialty areas of professional psychology. Training and Education in Professional Psychology. 2012;**6**:37-46. DOI: 10.1037/a0026964

[21] Kock H, Ellström PE. Formal and integrated strategies for competence development in SMEs. Journal of European Industrial Training. 2011;**35**:71-88. DOI: 10.1108/03090591111095745

[22] Bell BS, Tannenbaum SI, Ford JK, Noe RA, Kraiger K. 100 years of training and development research: What we know and where we should go. Journal of Applied Psychology. 2017;**102**:305-323. DOI: 10.1037/apl0000142

[23] Shah SMH, Sultana N, Hassain KS, Ali I. Impact of professional development on the performance of secondary school principals: A managerial perspective. International Journal of Management. 2011;**28**:92-105. Avaiable at: https://search.proquest.com/openview/d8d03b19a7f3b05206b6e758851bb434/1?pq-origsite=gscholar&cbl=5703

[24] Bathmaker AM, Avis J. Becoming a lecturer in further education in England: The construction of professional identity and the role of communities of practice. Journal of Education for Teaching. 2005;**31**:47-62

[25] Wenger E. Communities of practice and social learning systems. Organization. 2000;**7**:225-246. DOI: 10.1177/135050840072002

[26] Walsh R, Craig A. Radiation therapists' and diagnostic radiographers' participation in continuing professional development and knowledge of regulatory body registration. Journal of Radiotherapy in Practice. 2016;**15**:150-160. DOI: 10.1017/S1460396916000054

[27] Wareing A, Buissink C, Harper D, Gellert Olesen M, Soto M, Braico S, Rainford L. Continuing professional development (CPD) in radiography: A collaborative European meta-ethnography literature review. Radiography. 2017;**23**:S58-S63. DOI: 10.1016/j.radi.2017.05.016

[28] Cardoso L, Peralta CF. Gestão do conhecimento em equipas: Desenvolvimento de um instrumento de medida multidimensional. Pshychologica. 2011;**55**:79-93. Avaiable at: http://hdl.handle.net/10316.2/5602

[29] Anagnou E, Fragoulis I. The contribution of mentoring and action research to teachers' professional development in the context of informal learning. Review of European Studies. 2014;**6**:133-142. DOI: 10.5539/res.v6n1p133

[30] Keith DL. Principal desirability for professional development. Academy of Educational Leadership Journal. 2011;**15**:95-128. Avaiable at: https://www.abacademies.org/articles/aeljvol19no12015.pdf

[31] Malcolm J, Hodkonson P, Colley H. The interrelationships between informal and formal learning. Journal of Workplace Learning. 2003;**15**:313-318. DOI: 10.1108/13665620310504783

[32] Haemer HD, Borges-Andrade JE, Cassiano SK. Learning strategies at work and professional development. Journal of Workplace Learning. 2017;**29**:490-506. DOI: 10.1108/JWL-05-2016-0037

[33] Illeris K. Workplaces and learning. In: Malloch M, Cairns L, Evans K, O'Connor BN, editors. The SAGE Handbook of Workplace Learning. Londres: Sage; 2011. pp. 32-45

[34] Dochy R, Gijbels D, Segers M, Van den Bossche P. Theories of Learning for the Workplace: Building Blocks for Training and Professional Development Programs. London, England: Routledge; 2011. p. 168

[35] Poortman C, Illeris K, Nieuwenhuis L. Apprenticeship: From learning theory to practice. Journal of Vocational Education Training. 2011;**63**:267-287. DOI: 10.1080/13636820.2011.560392

[36] Abbad GS, Borges-Andrade JE. Aprendizagem Humana em Organizações de Trabalho. In: Zanelli JC, Borges-Andrade JE, Bastos AVB, editors. Psicologia, Organizações e Trabalho no Brasil. 2nd ed. Porto Alegre: Artmed; 2014. pp. 244-284

[37] Montano D, Reeske A, Franke F, Hüffmeier J. Leadership, followers' mental health and job performance in organizations: A comprehensive meta-analysis from an occupational health perspective. Journal of Organizational Behavior. 2017;**38**:327-350. DOI: 10.1002/job.2124

[38] Lacerenza CN, Reyes DL, Marlow SL, Joseph DL, Salas E. Leadership training design, delivery, and implementation: A meta-analysis. The Journal of Applied Psychology. 2017;**102**:1686. DOI: 10.1037/apl0000241

[39] Ceri-Booms M, Curşeu PL, Oerlemans LA. Task and person-focused leadership behaviors and team performance: A meta-analysis. Human Resource Management Review. 2017;**27**:178-192. DOI: doi.org/10.1016/j.hrmr.2016.09.010

[40] Mackey JD, Frieder RE, Brees JR, Martinko MJ. Abusive supervision: A meta-analysis and empirical review. Journal of Management. 2017;**43**:1940-1965. DOI: 10.1177/0149206315573997

[41] Northouse PG. Leadership: Theory and Practice. Londres: Sage publications; 2018. p. 520

[42] Gottlieb E. Mosaic leadership: Charisma and bureaucracy in exodus 18. The Journal of Management Development. 2012;**31**:974-983. DOI: 10.1108/02621711211259910

[43] Stogdill RM, Bass BM. Handbook of Leadership: A Survey of Theory and Research. 3rd Revised ed. New York: Free Press; 1990. p. 800

[44] Burns JM. Leadership. New York: Harper Row; 1978. p. 530

[45] Hunt JB. Leadership style orientations of senior executives in Australia: Senior executive leadership profiles: An analysis of 54 Australian top managers. Journal of American Academy of Business. 2010;**16**:207-217. Avaiable at: http://hdl.handle.net/1959.13/1051376

[46] Lok P, Crawford J. The effect of organisational culture and leadership style on job satisfaction and organisational commitment: A cross-national comparation. The Journal of Management Development. 2004;**23**:321-338. DOI: 10.1108/02621710410529785

[47] House RJ, Mitchell TR. Path-Goal Theory of Leadership. Seattle Dept of Psychology: Washington Univ; 1975

[48] Brown ME, Treviño LK, Harrison DA. Ethical leadership: A social learning perspective for construct development and testing. Organizational Behavior and Human Decision Processes. 2005;**97**:117-134. DOI: 10.1016/j.obhdp.2005.03.002

[49] Graen GB, Uhl-Bien M. Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. The Leadership Quarterly. 1995;**6**:219-247. Avaiable at: http://digitalcommons.unl.edu/managementfacpub/57

[50] Yukl G. Managerial leadership: A review of theory and research. Journal of Management. 1989;**15**:215-228. DOI: 10.1177/014920638901500207

[51] Blake R, Mouton J. The Managerial Grid: The Key to Leadership Excellence. Houston: Gulf Publishing Co; 1964. p. 350

[52] Bennis WG. An Invented Life: Reflections on Leadership and Change. Reading: Addison Wesley Publishing Company; 1993. p. 238

[53] Garg AK, Ramjee D. The relationship between leadership styles and employee commitment at a parastatal company in South Africa. The International Business Economics Research Journal (Online). 2013;**12**:1411-1436. DOI: 10.19030/iber.v12i11.8180

[54] Avolio BJ. Promoting more integrative strategies for leadership theory-building. The American Psychologist. 2007;**62**:25. DOI: 10.1037/0003-066X.62.1.25

[55] Larsson G, Eid J. An idea paper on leadership theory integration. Management Research Review. 2012;**35**:177-191. DOI: 10.1108/01409171211210109

[56] Spector PE. Industrial and Organizational Psychology: Research and Practice. 4th ed. Indianapolis: Wiley; 2008. p. 448

[57] Hersey P, Blanchard KH, Natemeyer WE. Situational leadership, perception, and the impact of power. Group Organization Studies. 1979;**4**:418-428. DOI: 10.1177/105960117900400404

[58] Tannenbaum W, Weschler IR, Massarik F. Leadership and Organization: A Behavioral Science Approach. Prentice Hall: Columbus-Ohio; 1961. p. 468

[59] Westley F, Mintzberg H. Visionary leadership and strategic management. Strategic Management Journal. 1989;**10**:17-32. DOI: 10.1002/smj.4250100704

[60] Bass BM, Riggio RE. Transformational Leadership. Mahwah: Lawrence Erlbaum; 2006. p. 282

[61] Venus M. Demystifying Visionary Leadership: in search of the essence of effective vision communication. [thesis]. Rotterdam: Erasmus University Rotterdam; 2013. p. 218

[62] Boomer J. Finding out what knowledge management is – And isn't. Accounting Today. 2004;**18**:9-22. Avaiable at: https://www.accountingtoday.com/news/finding-out-what-knowledge-management-is-and-isnt

[63] Rhoades L, Eisenberger R. Perceived organizational support: A review of the literature. The Journal of Applied Psychology. 2002;**87**:698-714. DOI: 10.1037//0021-9010.87.4.698

[64] Cardoso L. Gestão do conhecimento e competitividade organizacional: Um modelo estrutural. Comportamento Organizacional e Gestão. 2007;**13**:191-211. Avaiable at: http://www.scielo.mec.pt/pdf/cog/v13n2/v13n2a04.pdf

[65] Rafferty AE, Griffin MA. Refining individualized consideration: Distinguishing developmental leadership and supportive leadership. Journal of Occupational and Organizational Psychology. 2006;**79**:37-61. DOI: 10.1348/096317905X36731

[66] Grossi MGR, Costa JW, CBJ S. Propostas pedagógicas no contexto da educação corporativa. Revista Temas em Educação. 2017;**25**:36-55. Avaiable at: http://periodicos.ufpb.br/index.php/rteo/article/view/22792

[67] Coelho-Jr FA, Mourão L. Suporte à aprendizagem informal no trabalho: Uma proposta de articulação conceitual. Revista de Administração Mackenzie. 2011;**12**:224-253. DOI: 10.1590/S1678-69712011000600010

[68] Watkins KE, Marsick VJ. Toward a theory of informal and incidental learning in organizations. International Journal of Lifelong Education. 1992;**11**:287-300. DOI: 10.1080/0260137920110403

[69] Conlon TJ. A review of informal learning literature, theory and implications for practice in developing global professional competence. Journal of European Industrial Training. 2004;**28**:283-295. DOI: 10.1108/03090590410527663

[70] Yaacoub HK. Contexts for the professional development of part-timers. Competitiveness Review. 2012;**22**:434-451. DOI: 10.1108/10595421211266311

[71] Mourão L, Monteiro ACF, Viana VR. A influência do desenvolvimento profissional e da identificação organizacional na satisfação no trabalho. Psicotecnia. 2014;**45**:198-208. DOI: 10.15448/1980-8623.2014

[72] Le Clus M. Informal learning in the workplace. Training Development. 2017;**44**:28-29. DOI: 10.1080/158037042000225245

[73] Davis K, Newstrom JW. Human Behavior at Work: Organizational Behavior. New York: McGraw-Hill; 1989. p. 640