# Impact of the Characteristics of the Leader over the Characteristics of Work Teams

Guillermo Buenaventura-Vera

Additional information is available at the end of the chapter

http://dx.doi.org/10.5772/intechopen.76529

#### Abstract

This chapter focuses on the study of the impact of the characteristics of the leader on innovative work behavior (IWB) of the collaborators, establishing the influence of contributing factors, such as the organization learning capability (OLC) and team-member exchange (TMX). This presentation shows new relational models and contributions to the understanding the mechanisms about how variables of positive psychology (the self-efficacy (SE), hope (HP), optimism (OP), and resilience (RL) of the leader) or managerial variables (organization learning capability) can influence variables of an individual level (team member exchange and innovative work behavior). Supported by structural equation modeling, a statistical appropriate test method to confirm the empirical evidence of the hypotheses raised in the shown studies, it was possible to confirm the positive relationship among the considered constructs that we discuss in this chapter. An appendix with questionnaires that the reader can use in the measurement of the leader characteristics and the other factors in the model, in order to get the real information about these variables focused on the improvement of the team and the organization performance, is included.

Keywords: leader, collaborator, hope, optimism, resilience, team member exchange, innovative behavior, organizational learning

## 1. Introduction

Directing and managing an employee behavior have been an ongoing cutting-edge topic in research and organizational practice. The modification and management of team member behavior have been presented in psychological research for the last century (beginning, e.g.,

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.

with the work of [1–3]). Bandura [4] proposed theories that relate human motivation and performance with individual behavior according to both the self-efficacy (SE) theory [5] and cognitive social theory [6–9]. In this chapter, we describe how important leader personal characteristics (self-efficacy (SE), hope (HP), optimism (OP), and resilience (RL)) influence the innovative work behavior of the team members, based on the evidence of our investigation.

Self-efficacy is the capacity or personal conviction that the subject has the required behavior in order to produce a particular result in a situation, activity, or domain [8]. Hope is a positive motivational state energy goal-oriented ([10] p. 287). Optimism refers to relate positive future events with pertinent development reasons [11]. In addition, resilience is the capacity to recover quickly from the difficulties and go higher.

From another part, innovation, recognized as a source of competitive advantage and success for the company, operates in an increasingly more intense and dynamic global competitive environment, in which the development of new products and processes compete [12–15]. In order to get both long-term survival and competitive advantage [16, 17], companies need to innovate.

Innovation is an organization's capacity to improve its products and/or processes. But it too means its capacity to exploit the innovative potential of the innovative initiatives of its employees is an important element of organizational innovation, beyond the great technological advances [18]. These innovative initiatives also refer to as innovative behavior [19, 20]. Many academic works back the opinion that individual innovation helps achieve organizational success [21–24].

Many empirical studies provide evidence on the positive effect of innovation on the performance, profitability, growth, and effectiveness of the company (e.g., [25, 26]). Innovative behavior also relates to the organizational culture [27]. The high-performance practices facilitate knowledge management and information exchange [28], while human resource practices focused in organizational learning are associated with a greater level of organizational innovation [29].

Other important factor, organizational learning, is increasingly positioned as an initiative for survival [30]. The positive performance of an organization that learns, going beyond what is considered standard, has been demonstrated in several studies, which are found primarily in the professional literature in the fields of health, social services, and education [31–35]. The concept of organizational learning can be applied to business and nonprofit organizations, schools, colleges, and universities, as well as service organizations [36].

In summary, the study establishes the relationships among the four variables set out above in order to determine the impact of the leader's characteristics on the innovative behavior of the team members, identifying the influence that the organizational learning capacity and exchange among team members have on it.

The chapter is organized as follows: the first part (Section 2) presents the very important leader's characteristics involved in the discussion, self-efficacy, hope, optimism, and resilience. Then, we present the factors on other organizational levels, as the innovative individual behavior (Section 3), organizational learning capability (Section 4), and team member

exchange (Section 5). The models constructed in the investigations are shown in Section 6. Conclusions of the chapter are in Section 7. Finally, an annex lists the questionnaires that measure the total variables considered in the chapter.

# 2. Leader characteristics

Organizational resources lead to a sustainable competitive advantage when they are valuable, rare, and inimitable and have no substitutes [37]. Resource and capacity theory recognize that human capital is among the most important resources in terms of improving performance [37–39]. However, in order to generate economic benefits from human resource, the company must assemble, integrate, and promote its capacities through the implementation of strategies that result in the differentiation of performance.

By paying attention to the positive psychological characteristics of their leaders, organizations can increase employee engagement, motivation, and important work outcomes. For example, the leader's positive psychological characteristics were positively related to feelings of followers' empowerment (in [40]) and, also, a positive relationship between the leaders' positivity and the followers' positivity and performance (see [41]). By paying attention to the positive psychological characteristics of their leaders, organizations can increase employee engagement, motivation, and important work outcomes. We mentioned four important factors according to positive psychology, about leader characteristics. They will be presented in the following discussion.

### 2.1. Self-efficacy

Self-efficacy (SE) is the person's conviction to success, regarding their capacity of motivation, exploitation of their cognitive resources, and definition of courses of action that executes a specific task ([5, 8, 42, 43]). In a specific sense, Wood and Bandura [44] propose that self-efficacy is the belief in one's own capacities in order to mobilize the cognitive resources, motivation, and courses of action required to support the demands of a particular task or objective.

In short, the effective performance of new and complex roles in any activity requires the individual to have enough confidence in his or her competences to play a role that covers wider and proactive activities in order to go beyond the traditional technical performance requirements [45, 46]. It is precisely this requirement, in relation to the organizational context, that self-efficacy develops its conceptualization and contribution.

Self-efficacy refers to a person's judgment regarding his or her own capacity to handle specific situations, allowing us to focus not only on the abilities of people but also on their beliefs in terms of what they are capable of doing, regardless of the skills each actually possesses [47, 48]. Empirical research has shown that people who feel capable of performing certain tasks do so better, persist in their efforts (even in the face of adversity), and are capable of better handling situations of change [49–51].

High self-efficacy in persons means that they motivate themselves; designate high goals for themselves, without waiting for others to impose them with challenging goals; opt to perform difficult tasks; welcome the challenges, which are considered as opportunities for growth; strive to achieve the objectives; and face strong obstacles [11]. In addition, problems such as insecurity, skepticism, social criticism, negative feedback, the obstacles, and setbacks have a relatively small effect on people with high self-efficacy [52].

The self-efficacy-performance relationship is clearly recognized by scientific community (e.g., [42, 43, 52]). Also, self-efficacy has demonstrated a positive impact in the workplace, which increases the motivation [52], the effectiveness of leadership [41, 53], the creativity [54], the making of moral and ethical choices (Youssef and Luthans, 2005; [55]) the career decision-making, the participation (Lam et al., 2002), the learning [56], and the project [41, 57–60].

### 2.2. Hope

Hope (HP), according to Snyder et al. ([10] p. 287), is defined as a "positive motivational state that is based on a sense interactively derived from: 1) Agency (energy goals-oriented) successful and 2) path (planning to achieve goals) successful." The hope of individuals within an organization refers to the orientation toward goals. It sets goals, plans how to reach them, and puts the effort required to achieve them [11].

Originally, hope had been studied from the perspective of positive psychology, but it was not directly related to the organization. In this sense, hope was found to be positively related to academic and sports performance, physical and mental health, survival and the copying of beliefs and skills, and other aspects of life and well-being [61–66].

Since 2002, literature has been focused more on the organizational perspective of hope. In this regard, we found positive relationships between hope and organizational profitability [67]; also hope for entrepreneurs and their satisfaction with the property of the company [68]; also between the hope of the leaders and the profitability of their units, as well as satisfaction and retention of its employees [69]; and between the hope of Chinese workers and the performance described by the supervisor and the salary on merits [70]. On the other hand, the hope is related positively to the performance of employees, their job satisfaction, his happiness in the work, and its organizational commitment [71].

According to [11], hope can be improved through various approaches. One of these approaches is that of "individual goals": when individuals internalize the objectives, they become more committed to them; this commitment will increase their motivation, performance, and planning to achieve them. Another approach is the "goals"; this means designing goals that are well defined, measurable, and challenging but achievable. "Modular" is another way to improve the hope. It consists of breaking a complex goal in modules or small subgoals, easy to reach the ultimate goal. An approach is to increase the involvement of the person. When the individual receives power and autonomy to make decisions, he is not only encouraged but also flows a cognitive process that makes the person think that what seemed impossible is now possible.

In addition, the "reward system" can be adapted to increase the hope. When the rewards are related to specific actions, it shows that their actions directly influence its recognition, which can result in a higher motivation. Another approach is to give the individual access called "individual resources"; with a useful allocation of resources, individuals can better respond to changing situations and uncertainty and so achieve their goals in a more effective manner. The "strategic alignment" is also an important approach to improve the hope. This means aligning people with their strengths and talents, providing each individuals can receive "special training" for the development of hope; these trainings should be practical, interactive, and participatory so that they are effective. An important aspect to be taken into account, when training hope, is to keep high levels of awareness, self-regulation, self-evaluation, and self-development of the individual to be truly oriented toward the objectives.

## 2.3. Optimism

Optimism (OP) is colloquially understood as the expectation of positive developments in the future; however, the optimism within organizations is slightly different [11].

In organizations, high levels of optimism means that individuals interpret future developments as positive, long-term, comprehensive, and dependent on themselves. Meanwhile, the negative events as dependent of external, temporary, and situational reasons are interpreted [69, 72].

However, too much optimism could create a nonpositive thinking that relates to all things negative to external factors, ignoring one's own errors, which would create an illusory burst of ego. Therefore, individual with high level of optimism should be realistic and flexible, self-disciplined, analytical of events, planner of contingencies and a preventive person [11].

Literature supports that optimism is positively related with the physical and psychological health and well-being, with the auto-adjustment and recovery (e.g., [73–78]). Also, optimism is positively correlated with the work performance [70, 78, 79] and with successes in sales and leadership, among others (e.g., [41, 80, 81]).

Optimism can be improved to defy the pessimistic thoughts, by identifying and addressing the negative aspects and take them into account. It will encourage a more productive and positive attitude, which would create a more realistic optimism (Schneider, 2001; [81]). Through strategies of targets, individuals can be trained in construction of realistic and achievable goals, which can confidently experiment and succeed [11]. These authors point out that the optimism of the individual can, generally, be improved having compassion for the past, appreciation for the present, and looking for opportunities for the future.

### 2.4. Resilience

Usually, resilience is understood as the capacity to recover quickly from the difficulties, but it also means the performance improvement even more than until problems occur. Luthans,

Youssef, and Avolio [11] called it "recover and go beyond." This means that the individual, apart from recovering from an adverse situation, is able to return with an exceptional level of performance, which is higher than its normal performance level. **Figure 1** explains this process. It shows that performance level of 5 was normal during periods between moments 1 to 4. In the period between moments 4 and 5, the emergence of problems involves the consequent decrease in the performance to level of 1, and then radically increases the work effort. This effort does not stop at the level of routine operational performance, but it goes further: instead of again reaching 5 the normal level of execution, operations are now performed with benefits until level 8. It notes that the figures used in this graph are chosen randomly and do not have any statistical background; it is simply an illustration of the effect of "recovery and beyond."

The factor resilience (RL) is, then, an important factor for positive thinking and productive behavior, especially in times of difficulty and change. Luthans, Youssef, and Avolio [11] established that in this highly competitive, unpredictable, risky, and globalized world, resilience is becoming an important requirement at the level of the individual, the leader, and the organization.

Masten [82] found that there is a particular asset, which may contribute to greater resilience. These are cognitive skills, temperament, positive self-perception, faith, a positive attitude in life, emotional stability and self-regulation, a sense of humor and draw attention, i.e., the "attractiveness." Also, to increase resilience, are very important relationships; in this sense, Masten [82] highlights the importance of the care given to adults, effective parenting, the couple pro-social and regulatory standards, and collective effectiveness in the community, which give the individual the strength to "recover" the difficulty.

In the literature, resilience has been studied from the perspective of the development of clinicaland psychological subjects, especially in post-traumatic recovery and adaptation [11]. However, resilience is now also studying from the organizational point of view.

Luthans, Youssef, and Avolio [11] have found some ways to improve the resilience in organizations. These can be focused on assets, the risk, or the process.

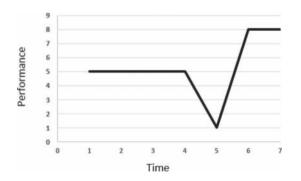


Figure 1. Representation of resilience: "recover and go beyond".

The asset-centric strategies develop resources that can increase the probability of achieving positive results. One of these strategies is to develop human capital. This can be done through the transmission of culture and business values, as well as its structure, strategies, and processes, using policies of socialization, orientation, or rotation at work. This will result in the development of the education, experience, knowledge, skills, and capabilities. Other asset strategy is the development of social capital. This can be done through open communication, building confidence, authenticity and transparency, feedback and recognition, teamwork, and efforts of balancing between the work and the enjoyment of life.

The risk-focused strategies consist of confronting and efficiently managing high risk factors rather than avoid them. Luthans, Vogelgesang, and Lester [83] recommend to reduce the risks of the organization to prevent difficulties or to recover when difficulties are present.

The last way to improve resilience is to apply process-centric strategies. This means to identify, select, develop, use, and maintain the right asset mix to manage risk factors.

# 3. Individual innovative behavior

In a competitive global environment, characterized by being both intense and dynamic, the development of new products and processes is increasingly becoming a key aspect of competition. Companies that enter the market faster and more efficiently than their competitors do so by offering products that closely meet the needs and expectations of their target consumers, thus significantly improving their competitive standing [12–15].

Innovation is acknowledged as a source of competitive advantage and thus the success of the company. Similarly, different empirical studies have provided evidence of the positive effect of innovation on the company's performance in terms of profitability, growth, and effectiveness [25, 26]. Companies need to innovate in their quest for both long-term survival and competitive advantage [16, 17].

Innovative work behavior (IWB) can be defined as the set of all individual actions aimed at the. generation, introduction, and application of some beneficial innovation at any level of the organization [84]. Gebert [18] defines innovation as an organization's capacity to improve its products or processes and to exploit the innovative potential and highlights the significance of the innovative initiatives of employees as an important element of organizational innovation, beyond great technological advances.

IWB is also related to the organizational culture, as it can create commitment among the members of an organization in terms of establishing innovation as an organizational value and accepting the common norms related to innovation within the organization [27]. Some studies indicate, e.g., that so-called high-performance practices facilitate knowledge management and information exchange [28]. Various human resource practices that are aligned to promote learning are also associated with a higher level of organizational innovation [29] and organizational commitment [58, 85–87].

# 4. Organizational learning capability

Today, organizational learning capability (OLC) emerges as an essential competence for organizations that are capable of evaluating their environment in order to identify opportunities, threats, and pressures for change. It means to develop strategic competences through the learning at all levels of the organization. Studies have shown that organizational learning affects competitive advantage [88]. Also, it affects financial and nonfinancial performance [89–91] and plays a part in the tangible and intangible benefits of strategic alliances [92], the unit cost of production [93], and innovation [94].

The organization learning capability (OLC) establishes the levels of capability an organization has to apply management practices and maintain a precise and appropriate structure and procedures that enable it to improve, facilitate, and promote learning. This permits the organization to facilitate and promote learning [95]. Goh [96] believes that the growth of these practices will promote greater learning capacity throughout the organization.

Conducting an important review of the literature, Jerez et al. [97] proposed a four-dimensional model that determines organizational learning capability. These dimensions are the commitment by management, a system perspective, openness and experimentation, and knowledge integration and transfer. The first dimension, the commitment by management, refers to the fact that management must recognize the importance of learning, developing a culture that promotes the acquisition, creation, and transfer of knowledge as basic organizational values [19, 98–100], and also articulating a strategic vision of learning, making it, in turn, a central element [101–104].

The system perspective involves guiding the organization and its members a common identity [30, 105]. Individuals of all levels in the organization must have a clear vision of the objectives and understand how they can assist in their development [101, 106]. Striving for a climate of openness and experimentation necessitates generative learning and mental openness that welcomes the arrival of new ideas and perspectives, both internal and external. This permits constant actualization of the individual knowledge, its expansion, and its improvement [19, 23, 30, 107].

Knowledge integration and transfer are the fourth dimension, which refers to the two closely related processes that occur simultaneously: the internal transfer and the integration of knowledge. The efficacy of these two processes is based on the prior existence of the capacity for absorption [108], which implies the elimination of internal barriers that prevent the transfer of the best practices inside the company [109]. Jerez-Gomez et al. [97] used these four dimensions to develop and successfully test a scale to measure organizational learning capability.

## 5. Team-member exchange

The relationship of support or exchange between an individual and his or her work team (team-member exchange (TMX)) is defined as the quality of the interpersonal relationships

that exist between the said individual and his or her teammates, understood in an integral sense [110, 111].

This concept, initially proposed by Seers [110, 111] as a construct for generating functions complementary to the quality of the leader-member exchange (LMX), specifically refers to "the individual's perception of his or her exchange relationship with peers within the work group as a whole" ([110, 111] pp. 119).

Based on LMX theory, [110, 111] suggested that individuals are involved in a process of establishing functions with their work groups. Thus, TMX theory, different to LMX theory, is based on functional theory [112] and social exchange theory [113, 114]. This theory suggests that an individual's responses at work are the product of the interaction between the individual and the set of the issuers of functions with which he or she generally interacts.

Normally, the key members in terms of his/her set of functions are his/her supervisor and colleagues. However, [110, 111] indicates that research on this phenomenon is focused on the supervisor as the issuer of functions, neglecting the effects of work relationships among colleagues in the individual's group. For him, this aspect represents a high importance and is of special interest.

Empirical studies have shown that the quality of TMX is related to the job satisfaction of its members and their performance [110, 111], as well as the identification, commitment, and turnover rate of the team members [115]. The average level of TMX within a work team is expected to correspond to the group's effectiveness.

# 6. Development of the model and our investigation

We designed a model taking alternatively each of the four leader characteristics and combinations of some of them as a variable called psychological leader characteristics (PLC) and test in how they influence IWB, mediated by OLC and TMX. To do so, we studied public secondary education institutions in Colombia, using structural equation models as the statistical methodology to verify those proposed relationships. **Figure 2** shows these proposed relations.

**Figure 2** shows our proposed model according to which the psychological characteristics of the leader (PLC) positively influence the innovative behavior of the collaborator (IWB) and contribute to improve the learning capacity organization (OLC) and the team member exchange (TMX), which also influence positively the IWB.

The study, carried out with seven sub-models, each taking one or two variables of the PCL, as shown in the two first columns of **Table 1**, demonstrated a conclusive evidence of the positive influence of the characteristics of the leader of the other variables involved, as shown in the following columns of **Table 1**.

**Table 1** presents the standardized coefficients of relationship among the variables studied, all with a statistical significance greater than 99%. It is possible to observe how SE and HP have

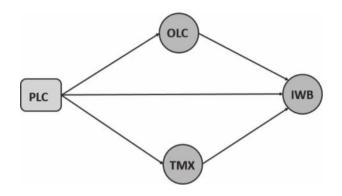


Figure 2. Model showed the influences of PLC.

a direct positive influence on the IWB (with positive coefficients of 0.25 and 0.17). SE and HP also contribute positively to the OLC level (positive coefficients of 0.70 and 0.76) and the TMX level (with positive coefficients of 0.26 and 0.17).

At the same time, the IWB receive positive influence of OLC and TMX (positive coefficients of 0.13 and 0.10) when the PLC variable is SE, and, too, positive influence of OLC and TMX (positive coefficients of 0.14 and 0.10) when the PLC variable is HP.

In summary there are positive influence of SE and HP on OLC, TMZ and IWB, and there are positive influence of OLC and TMX on IWB.

However, the alone RL characteristic does not affect any variable (NS in all relations), and single OP property influences positively in the OLC only. But when these two come together (see sub-model 5 in **Table 1**), their positive impact is significant in all the s cases.

When HP and RL act together, the positive impact of the RL is greater (see sub-model 6 in **Table 1**) and when operating SE and HP at the time, the most positive impact is on OLC, TMX, and IWB (see sub-model 6 in **Table 1**).

Sub-model	PLC	OLC	тмх	IWB	$OLC \rightarrow IWB$	$TMX \rightarrow IWB$
1	SE	0.70	0.26	0.25	0.13	0.10
2	OP	0.52	NS	NS	0.12	0.09
3	HP	0.76	0.17	0.17	0.14	0.10
4	RL	NS	NS	NS	NS	NS
5	OP + RL	0.45	0.22	0.22	0.12	0.10
6	HP + RL	1.18	0.27	0.28	0.14	0.10
7	SE + HP	0.78	0.78	0.21	0.14	0.10

Table 1. Statistical results of the studies.

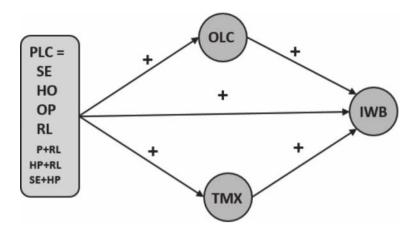


Figure 3. Positive influences of PLC toward IWB.

**Figure 3** shows a schematic view of the discussed relations between PLC (SE, OP, HP, RL, OP+RL, HP + RL, SE + HP) and the positive variables of OLC in the organization, TMX at the work team, and the individual IWB.

## 7. Conclusions

The models presented by the studies have positively demonstrated the initially proposed relationships, evidencing the positive correlation between the psychological characteristics of the leader (PLC) of the team leader and the innovative behavior of the individual (IWB); in other words, PLC is a determining group of factors in innovative behavior. Furthermore, the studies provided empirical evidence for the mediating role played by OLC and TMX in this positive relationship between the leader's PLC and the team member's IWB on the work team.

The positive correlation between self-efficacy of the leader and the behavior of the collaborator is demonstrated. Additionally, the hope of the leader presents a positive relationship with the behavior of the collaborator. Optimism and resilience of the leader, by themselves, influence a few or nothing the innovativeness of the employee, but once accompanied by other positive features of the leader, they do. This means that a good way to improve the behaviour of the partners is to improve the psychological characterisiticas (self-efficacy, hope, resilience, optimism) of the leader.

The results shown can be used to make empirical evidence to the relationships among the theoretical constructs. First of all, in agreement with emerging research on social cognitive theory (e.g., [116]), PCL, OLC, and TMX have an additive effect on their positive relationship with IWB. This offers administrators and organizations opportunities to increase the value of their companies, based on evidence supporting the action of the three aforementioned constructs on IWB.

Secondly, this study proposes and provides empirical evidence of the mediation of OLC or TMX on the impact of the leader's PLC on the team member's IBW. In fact, OLC and TMX are positive impacted by PLC, and at the same time OLC and TMX improve IWB. This finding constitutes a significant academic contribution, as it reveals the need to promote the intermediate constructs in order to achieve better performance of PLC on IWB. Both the systemic learning objectives proposed by OLC and the individual behavior related to rational open-mindedness promoted by TMX seem to be critical for effective problem-solving and innovative behavior in general.

Also, the demonstrated positive relationship between the quality of TMX and the level of IWB corresponds to a specific aspect of social exchange theory, through mechanisms of perceived organizational support [117], cohesion, and the generation of trust [118]. In this context, the present research contributes to validating these mechanisms by contributing empirical evidence on the relationship between the two previously mentioned variables.

Other theoretical contribution of this research consists of having empirically demonstrated the positive relationship between TMX and IWB. This relationship was seminally suggested and theoretically defended by Scott and Bruce [110, 111], but at times, it was the only one of their eight hypotheses not validated by their empirical investigation.

The results of the studies consigned in this chapter provide scientific evidence about the positive and highly significant relationship between the psychological characteristics of the leader (PLC) and the innovative behavior of the team member. It represents a contribution to the knowledge on the handling of complex processes related to human resources in today's organizations, as framed within resource capacity theory, and more specifically, in the field of study of positive organizational behavior, a current research interest [119].

In the social context, the present research contributes knowledge that the PLC of the leader operates as an antecedent mechanism for promoting the potential innovative behavior of the individual, both directly and in a mediated manner through the perceived levels of organization construct (OLC) and the quality of TMX. Here is where a mechanism of opportunity arises for organizations that are able to incorporate self-efficacy measures into their team leader selection processes, in an effort to increase the impact on the innovative behavior of their team members.

As a practical aspect, we recommend that companies include in their selection processes the study of the psychological characteristics of the leader (SE, HP, OP, Rl). The questionnaires to measure the levels of these characteristics have been included in the appendix to this chapter.

Measurement of the OLC, TMX, and IWB factor questionnaires have also been included, so that a director of human resources can be measured, along the time, the progress of the teams of the company in all factors worked in this chapter.

# Acknowledgements

The author wants to thank the Universidad Icesi in Colombia, for supporting the present work with all kinds of resources.

## A. Appendices. Questionnaires for measurements

All measurements (answers) in 1 to 7 scale: 1 (lowest; fully disagree)-7 (highest; fully agree).

Self-efficacy measurement questionnaire (in Ref. [46]).

To be applied to the individual who is (or a candidate to) a leader:

How confident would you feel? (1: lowest; 7: highest).

- **1.** Analyzing a long-term problem to find a solution.
- 2. Representing your work area in meetings with senior management.
- 3. Designing new procedures for your work area.
- 4. Making suggestions to management about ways to improve the work of your section.
- 5. Contributing to discussions about the company's strategy.
- 6. Writing a proposal to spend money in your work area.
- 7. Helping to set targets/goals in your work area.
- 8. Contacting people outside the company (e.g., suppliers, customers) to discuss problems.
- 9. Presenting information to a group of colleagues.
- **10.** Visiting people from other departments to suggest doing things, differently.

#### Hope measurement questionnaire (in Ref. [10]).

To be applied to the individual who is (or a candidate to) a leader:

How much do you agree with the sentence? (1: fully disagree; 7: fully agree).

- 1. If I should find myself in a jam at work, I could think of many ways to get out of it.
- 2. At the present time, I am energetically pursuing my work goals.
- 3. There are lots of ways around any problem.
- 4. Right now, I see myself as being pretty successful at work.
- 5. I can think of many ways to reach my current work goals.
- 6. At this time, I am meeting the work goals that I have set for myself.

#### Resilience measurement questionnaire (in Ref. [120]).

To be applied to the individual who is (or a candidate to) a leader:

How much do you agree with the sentence? (1: fully disagree; 7: fully agree).

- 1. When I have a setback at work, I have trouble recovering from it and moving on.
- 2. I usually manage difficulties one way or another at work.
- 3. I can be "on my own" if I have to.
- 4. I usually take stressful things at work in stride.
- 5. I can get through difficult times at work because I've experienced difficulty before.
- 6. I feel I can handle many things at a time at this job.
- 7. I am determined.
- 8. My belief in myself gets me through hard times.
- 9. My life has meaning.
- 10. I have enough energy to do what I have to do.

#### Optimism measurement questionnaire (in Ref. [121]).

To be applied to the individual who is (or a candidate to) a leader:

How much do you agree with the sentence? (1: fully disagree; 7: fully agree).

- 1. In uncertain times, I usually expect the best.
- 2. It's easy for me to relax. (Filler item)
- 3. If something can go wrong for me, it will. (Reverse)
- 4. I always look on the bright side of things.
- 5. I'm always optimistic about my future.
- 6. I enjoy with my friends a lot. (Filler item)
- 7. It's important for me to keep busy. (Filler item)
- 8. I hardly ever expect things to go my way. (Reverse)
- 9. Things never work out the way I want them to. (Reverse)
- 10. I don't get upset too easily. (Filler item)
- 11. I'm a believer in the idea that "every cloud has a silver lining."
- 12. I rarely count on good things happening to me. (Reverse)

#### Organization learning capability questionnaire.

To be applied to the collaborator:

How much do you agree with the sentence? (1: fully disagree; 7: fully agree).

- 1. The managers frequently involve their staff in important decision-making processes.
- 2. Employee learning is considered more of an investment than an expense.
- **3.** The firm's management looks favorably on carrying out changes in any area to adapt to and/or keep ahead of new environmental situations.
- 4. Employee learning capability is considered a key factor in this firm.
- 5. In this firm, innovative ideas that work are rewarded.
- 6. All employees have generalized knowledge regarding this firm's objectives.
- **7.** All parts that make up this firm (departments, sections, work teams, and individuals) are well aware of how they contribute to achieving the overall objectives.
- 8. All parts that make up this firm are interconnected, working together in a coordinated fashion.
- **9.** This firm promotes experimentation and innovation as a way of improving the work processes.
- **10.** This firm follows up what other firms in the sector are doing, adopting those practices and techniques it believes to be useful and interesting.
- **11.** Experiences and ideas provided by external sources (advisors, customers, training firms, etc.) are considered a useful instrument for this firm's learning.
- **12.** Part of this firm's culture is that employees can express their opinions and make suggestions regarding the procedures and methods in place for carrying out tasks.
- 13. Errors and failures are always discussed and analyzed in this firm, on all levels.
- **14.** Employees have the chance to talk among themselves about new ideas, programs, and activities that might be of use to the firm.
- 15. In this firm, teamwork is the usual way to work.
- **16.** The firm has instruments (manuals, databases, files, organizational routines, etc.) that allow what has been learned in past situations to remain valid, although the employees are no longer the same.

#### Team member exchange measurement questionnaire (in Ref. [111]).

To be applied to the collaborator:

How much do you agree with the sentence? (1: fully disagree; 7: fully agree)

- 1. The partners I work with help me to learn new ways of doing things at work.
- **2.** The partners I work with are confident that I'll be at the height of what is expected of me at work.

- **3.** I suggest to my colleagues ways to improve the ways of doing things, and that does not cause them any problems.
- **4.** When I screw something, my coworkers tell me with total naturalness that I do not have any fear of getting offended.
- **5.** When my coworkers make something wrong, I tell them with total naturalness that there is no fear for them to get offended.
- 6. My coworkers recognize my professional potential.
- 7. My colleagues understand my problems.
- **8.** I have much flexibility when it comes to exchanging shifts, working hours, or tasks with my coworkers.
- 9. Usually, when I can't do something or have a problem, I ask my colleagues for help.
- 10. Usually, when a coworker doesn't know what to do or have a problem, I offer him my help.
- **11.** If a partner is saturated with work, I usually offer him a help, even though those tasks do not correspond to me.
- **12.** If I'm saturated with work, my colleagues usually offered me a help, though these tasks do not correspond to them.

#### Innovative work behavior measurement questionnaire (in Ref. [20]).

To be applied to an individual who observes the collaborator:

He/she (1: never; 7: always).

- 1. Searches out new technologies, processes, techniques, and/or product ideas.
- 2. Generates creative ideas.
- 3. Promotes and champions ideas to others.
- 4. Investigates and secures funds needed to implement new ideas.
- 5. Develops adequate plans and schedules for the implementation of new ideas.
- 6. Is innovative.

## Author details

Guillermo Buenaventura-Vera

Address all correspondence to: buenver@icesi.edu.co

Accounting and Finance Studies Department, Faculty of Administrative and Economic Sciences, Universidad Icesi, Colombia

## References

- Pavlov IP. Conditioned Reflexes: An Investigation of the Physiological Activity of the Cerebral Cortex. Translated and Edited by G. V. Anrep. London: Oxford University Press; 1927. p. 142
- [2] Skinner BF. The Behavior of Organisms: An Experimental Analysis. New York: Appleton-Century; 1938
- [3] Thorndike E. An Introduction to the Theory of Mental and Social Measurements. New York: Teachers College; 1913
- [4] Bandura A. Principles of Behavior Modification. New York: Holt, Rinehart & Winston behavior modification on task performance; 1969. pp. 1975-1995 Academy of Management
- [5] Bandura A. Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review. 1977;84:191-215
- [6] Bandura A. Self-efficacy mechanism in human agency. American Psychologist. 1982;37(2): 122-147
- [7] Bandura A. Pensamiento y acción: fundamentos sociales. Barcelona: Martínez Roca. (traducción de Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, N.J: Prentice-Hall; 1987
- [8] Bandura A. Self-Efficacy: The Exercise of Control. New York, NY: Freeman; 1997
- [9] Bandura A, Walters RH. Aprendizaje social y desarrollo de la personalidad. Madrid: Alianza Universidad; 1983
- [10] Snyder CR, Sympson SD, Ybasco FC, Borders TF, Bayback MA, Higgins RL. Development and validation of the state hope scale. Journal of Personality and Social Psychology. 1996;79(2):321-335
- [11] Luthans F, Youssef CM, Avolio BJ. Psychological Capital: Developing the Human Competitive Edge. Oxford, UK: Oxford University Press; 2007
- [12] Nonaka I. A dynamic theory of organizational knowledge creation. Organization Science. 1994;5(1):14-37
- [13] Nonaka I, Takeuchi H. The Knowledge Creating Company. Oxford, England: Oxford University Press; 1995
- [14] Prahalad C, Hamel G. The core competence of the corporation. Harvard Business Review, Vol. 1990;68(1):79-91
- [15] Takeuchi H, Nonaka I. The new new product development game. Harvard Business Review. 1986;64(1):137-146
- [16] Simon M, Elango B, Houghton SM, Savelli S. The successful product pioneer: Maintaining commitment while adapting to change. Journal of Small Business Management. 2002;40(3):187-203

- [17] Tidd J, Bessant J, Pavitt K. Managing Innovation: Integrating Technological, Market & Organizational Change. Chichester: John Wiley & Sons; 2001
- [18] Gebert D. Führung und Innovation. Stuttgart: Kohlhammer; 2002
- [19] Scott SG, Bruce RA. Determinants of innovative behavior: A path model of individual innovation in the workplace. Academy of Management Journal. 1994a;37(3):580-607
- [20] Scott SG, Bruce RA. Determinants of innovative behavior: A path model of individual innovation in the workplace. Academy of Management Journal. 1994b, Jun 1994;37(3):580-608
- [21] Amabile TM. A model of creativity and innovation in organizations. Research in Organizational Behavior. 1988;10:123-167
- [22] Axtell CM, Holman DJ, Unsworth KL, Wall TD, Waterson PE, Harrington E. Shopfloor innovation: Facilitating the suggestion and implementation of ideas. Journal of Occupational and Organizational Psychology. 2000;73:265-285
- [23] Smith GP. The New Leader: Bringing Creativity and Innovation to the Workplace, Chart your Course. Georgia: Conyers; 2002
- [24] Unsworth KL, Parker SK. Proactivity and innovation: Promoting a new workforce for the new workplace. In: Holman T, Wall TD, Clegg CW, Sparrow P, Howard A, editors. The New Workplace: A Guide to the Human Impact of Modern Work Practices. Chichester: Wiley; 2003. pp. 175-196
- [25] Berson Y, Oreg S, Dvir T. CEO values, organizational culture and firm outcomes. Journal of Organizational Behavior. 2008;29(5):615-633
- [26] Prajogo DI, Ahmed PK. Relationships between innovation stimulus, innovation capacity, and innovation performance. R&D Management. 2006;36(5):499-515
- [27] Hartmann A. The role of organizational culture in motivating innovative behaviour in construction firms. Construction Innovation: Information, Process, Management. 2006;6(3):159-172
- [28] Laursen K, Foss NJ. New human resource management practices, complementarities and the impact on innovation performance. Cambridge Journal of Economics. 2003;27(2):243-263
- [29] Shipton H, West MA, Dawson J, Birdi K, Patterson M. HRM as a predictor of innovation. Human Resource Management Journal. 2006;16(1):3-27
- [30] Senge P. The leader's new work: Building learning organizations. Sloan Management Journal Review. 1990;32:7-23
- [31] Carnochan S, Austin MJ. Implementing welfare reform and guiding organizational change. Administration in Social Work. 2001;26(1):61-77
- [32] Gould N. Becoming a learning organization: A social work example. Social Work Education. 2000;19(6):585-596

- [33] Gould N, Baldwin M, editors. Social Work, Critical Reflection and the Learning Organization. Ashgate: Aldershot; 2004
- [34] Hawkings P, Shohet R. Supervision in the Helping Professions. England: Open University Press; 2006
- [35] Kurtz PD. A case study of a network as a learning organization. Administration in Social Work. 1998;22(2):57-73
- [36] Akhtar N, Ahmad Khan R. Exploring the paradox of organizational learning and learning organization. Interdisciplinary Journal of Contemporary Research in Business. 2011;2(9):257-270
- [37] Barney JB. Firm resources and sustained competitive advantage. Journal of Management. 1991;17(1):99-120
- [38] Hitt MA, Bierman L, Shimizu K, Kochhar R. Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. Academy of Management Journal. 2001;44(1):13-28
- [39] Wright PM, McMahan GC, McWilliams A. Human resources and sustained competitive advantage: A resource-based perspective. International Journal of Human Resource Management. 1994;5(2):301-326
- [40] Chandler GN, Jansen E. Founder self-efficacy and venture performance: A longitudinal study. Academy of Management Proceedings. 1997:98-102
- [41] Chemers MM, Watson CB, May ST. Dispositional affect and leadership effectiveness: A comparison of self-esteem, optimism, and efficacy. Personality and Social Psychology Bulletin. 2000;26(3):267-277
- [42] Stajkovik AD, Luthans F. Self-efficacy and work-related performance: A meta-analysis. Psychological Bulletin. 1998a;124:240-261
- [43] Stajkovik AD, Luthans F. Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioural approaches. Organizational Dynamics. 1998b;26:62-74
- [44] Wood R, Bandura A. Social cognitive theory of organizational management. Academy of Management Review. 1989;14:361-384. DOI: 10.5465/AMR.1989.4279067
- [45] Parker S. Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. Journal of Applied Psychology. 1998a;(6):835-852
- [46] Parker SK. Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. Journal of Applied Psychology. 1998b;83(6):835-882
- [47] Bandura A. Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs, N.J: Prentice-Hall; 1986
- [48] Gist ME, Mitchell TR. Self-efficacy: A theoretical analysis of its determinants and malleability. Academy of Management Review. 1992;17:183-211

- [49] Hill T, Smith ND, Mann MF. Role of efficacy expectations in predicting the decision to use advanced technologies: The case of computers. Journal of Applied Psychology. 1987;72:307-313
- [50] Lent RW, Brown SD, Larkin KC. Comparison of three theoretically derived variables in predicting career and academic behavior: Self-efficacy, interest congruence, and consequence thinking. Journal of Counseling Psychology. 1987;34(3):293-298
- [51] Wood RE, Bandura A, Bailey T. Mechanisms governing organizational performance in complex decision-making environments. Organizational Behavior and Human Decision Processes. 1990;46:181-201
- [52] Bandura A, Locke E. Negative self-efficacy and goal effects revisited. Journal of Applied Psychology. 2003;88:87-99
- [53] Luthans F, Luthans K, Hodgetts R, Luthans B. Positive approach to leadership (PAL): Implications for today's organizations. Journal of Leadership Studies, Vol. 2010;8(2):3-20
- [54] Tierney P, Farmer S. Creative self-efficacy: Its potential antecedents and relationship to creative performance. Academy of Management Journal. 2002;45:1137-1148
- [55] Nilsson J, Schmidt C, Meek W. Reliability generalization: An examination of the career decision-making self-efficacy scale. Educational and Psychological Measurement. 2002;62:647-658
- [56] Ramakrishna H. The moderating role of updating climate perceptions in the relationship between goal orientation, self-efficacy, and job performance. Human Performance. 2002;15:275-297
- [57] Boyd NG, Vozikis GS. The influence of self-efficacy on the development of entrepreneurial intentions and actions. Entrepreneurship Theory and Practice. 1994;18:63-77
- [58] Chen CC, Greene PG, Crick A. Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? Journal of Business Venturing. 1998;13:295-316
- [59] Neck CP, Neck HM, Manz CC, Godwin J. I think I can, I think I can: A self leadership perspective toward enhancing entrepreneurial thought patterns, self-efficacy, and performance. Journal of Management Psychology. 1999;14:477-501
- [60] Luthans F, Avey JB, Avolio SM, Combs GM. Psychological capital development: Toward a micro-intervention. Journal of Organizational Behavior. 2006;27:387-393
- [61] Range L, Pentin S. Hope, hopelessness and suicidality in college students. Psychological Reports. 1994;75:456-458
- [62] Curry LA, Snyder CR, Cook DI, Ruby BC, Rehm M. The role of hope in student-athlete academic and sport achievement. Journal of Personality and Social Psychology. 1997;73:1257-1267
- [63] Scioli A, Chamberlin C, Samor CM, LaPointe AB, Campbell TL, MacLeod AR, McLenon JA. A prospective study of hope, optimism, and health. Psychological Reports. 1997;81:723-733

- [64] Kwon P. Hope and dysphoria: The moderating role of defense mechanisms. Journal of Personality. 2000;68:199-223
- [65] Onwuegbuzie A, Snyder CR. Relations between hope and graduate students' coping strategies for studying and examination taking. Psychological Reports. 2000;86:803-806
- [66] Snyder CR. Handbook of Hope. San Diego: Academic Press; 2000
- [67] Adams VH, Snyder CR, Rand KL, King EA, Sigmond DR, Pulvers KM. Hope in the workplace. In: Giacolone R, Jurkiewicz C, editors. Handbook of Workplace Spirituality and Organizational Performance. New York: Sharpe; 2002. pp. 367-377
- [68] Jensen SM, Luthans F. The impact of hope in the entrepreneurial process: Exploratory research findings. In: Decision Sciences Institute Conference Proceedings. San Diego, CA; 2002
- [69] Peterson SJ, Luthans F. The positive impact and development of hopeful leaders. Leadership and Organizational Development Journal. 2003;**24**(1):26-31
- [70] Luthans F, Avolio BJ, Avey JB, Norman SM. Positive psychological capital: Measurement and relationship with performance and satisfaction. Personnel Psychology. 2007;60: 541-572
- [71] Youssef CM. Resiliency development of organizations, leaders and employees: Multilevel theory building and individual-level, path-analytical empirical testing. Unpublished doctoral dissertation. University of Nebraska-Lincoln; 2004
- [72] Seligman M. Learned Optimism. New York: Pocket Books; 1998
- [73] Scheier M, Carver C. Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. Cognitive Therapy and Research. 1992;16:201-228
- [74] Scheier MF, Carver CS. Goals and confidence as self-regulatory elements underlying health and illness behavior. In: Cameron LD, Leventhal H, editors. The Self-Regulation of Health and Illness Behaviour. London, UK: Routledge; 2003. pp. 17-41
- [75] Scheier M, Matthews K, Owen J, Magovern G, Lefebvre R, et al. Dispositional optimism and recovery from coronary artery bypass surgery: The beneficial effects of psysical and psychological well-being. Journal of Personality and Social Psychology. 1989;57:1024-1040
- [76] Peterson C. Personal control and well-being. In: Kahneman D, Diener E, Schwarz N, editors. Well-Being: The Foundations of Hedonic Psychology. New York: Russell Sage; 1999. pp. 288-301
- [77] Seligman M. Authentic Happiness. New York: Free Press; 2002
- [78] Scheier M, Carver C. Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. Health Psychology. 1985;4:219-247
- [79] Luthans F, Avolio BJ, Walumbwa FO, Li W. The psychological Capital of Chinese workers: Exploring the relationship with performance. Management and Organization Review. 2005;1:249-271

- [80] Wunderley LJ, Reddy WB, Dember WN. Optimism and pessimism in business leaders. Journal of Applied Social Psychology. 1998;28(9):751-760
- [81] Schulman P. Applying learned optimism to increase sales productivity. Journal of Personal Selling and Sales Management. 1999;19:31-37
- [82] Masten AS. Ordinary magic: Resilience process in development. American Psychologist. 2001;56:227-239
- [83] Luthans F, Vogelgesang GR, Lester PB. Developing the psychological Capital of Resiliency. Human Resource Development Review. 2006;5(1):25-44
- [84] West M, Farr J. Innovation at work: Psychological perspectives. Social Behavior. 1989;4(1):15-30
- [85] Grover SL, Crooker KJ. Who appreciates family-responsive human resource policies: The impact of family-friendly policies on the organizational attachment of parents and non-parents. Personnel Psychology. 1995;48(2):271-288
- [86] Rodwell JJ, Kienzle R, Shadur MA. The relationship among work-related perceptions, employee attitudes, and employee performance: The integral role of communications. Human Resource Management. 1998;37(3-4):277-293
- [87] Schwochau S, Delaney J, Jarley P, Fiorito J. Employee participation and assessments of support for organizational policy changes. Journal of Labor Research. 1997;18(3):379-401
- [88] Jashapara A. Cognition, culture and competition: An empirical test of the learning organization. The Learning Organization. 2003;10(1):31-50
- [89] Bontis N, Crossan MM, Hulland J. Managing an organizational learning system by aligning stocks and flows. Journal of Management Studies. 2002;39(4):437-469
- [90] Dimovski V, Slerlavaj M. Performance effects of organizational learning in a transitional economy. Problems and Perspectives in Management. 2005;3(4):56-67
- [91] Jiménez D, Cegarra JG. Influence of mentoring and coaching in the relational learning process. International Journal of Management Concepts and Philosophy, vol. 2006;2(2):154-167
- [92] Simonin BL. 'the importance of collaborative know-how: An empirical test of the learning organization'. Academy of Management Journal. 1997;40(5):1150-1174
- [93] Darr E, Argote L, Epple D. The acquisition, transfer, and depreciation of learning in service organizations: Productivity in franchises. Management Science. 1995;44:1750-1762
- [94] Verdu A, Llorens FJ, Molina VJ. Flexibility of manufacturing systems, strategic change and performance: Theory and evidence. International Journal of Production Economics. 2005;98(3):273-289
- [95] Shoid MSM, Kassim NA, Salleh MIM. Identifying the determinants of organizational learning capabilities (OLC). International Journal of Academic Research. 2012;4(4):113-117. DOI: 10.7813/2075-4124/4-4/B.17

- [96] Goh SC. Improving organizational learning capability: Lesson from two case studies. The Learning Organization. 2003;**10**(4):216-227
- [97] Jerez-Gómez P, Céspedes LJ, Cabrera R. Organizational learning and compensation strategies: Evidence from the Spanish chemical industry. Human Resource Management. 2005a;44(3):279-299
- [98] Stata R. Organizational learning: The key to management innovation. Sloan Management Review. 1989;**30**(3):63-74
- [99] McGill ME, Slocum JW Jr, Lei JW. Management practices in learning organizations. Organizational Dynamics. 1992;21(1Summer):4-17
- [100] Garvin D. Building a learning organization. Harvard Business Revie. 1993;71(4):78-92
- [101] Hult, G. T. y Ferrell, O. C. (1997) Global organizational learning capability in purchasing: Construct and measurement. Journal of Business Research. 40, pp. 97-111
- [102] Nevis E, DiBella AJ, Gould JM. Understanding organizational learning systems. Sloan Management Review. 1995;36(2):73-85002E
- [103] Slocum JW, McGill M, Lei DT. The new learning strategy; anytime, anything, anywhere. Organizational Dynamics. 1994;**23**(2):33-47
- [104] Ulrich D, Von Glinow MA, Jick T. High impact learning: Building and diffusing learning capability. Organizacional Dynamics. 1993;22(2):52-66
- [105] Sinkula JM. Market information processing and organizational learning. Journal of Marketing. 1994;(1):35-45
- [106] Lei D, Slocum JW, Pitts RA. Designing organizations for competitive advantage: The power of unlearning and learning. Organizational Dynamics. 1999;37(3):24-38
- [107] Leonard-Barton D. Core capabilities and core rigidities: A paradox in managing new product development. Strategic Management Journal. 1992;13:111-125
- [108] Cohen W, Levinthal D. Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly. 1990;35:128-152
- [109] Szulanski G. Exploring internal stickiness: Impediments to the transfer of best practice within the firm. Strategic Management Journal. 1996;17(Summer special issue):27-43
- [110] Seers A. Team-member Exchange quality: A new construct for role-making research. Organizational Behavior and Human Decision Processes. 1989a;43:118-135 P 119
- [111] Seers A. A new construct for role-making research. Organizational Behavior and Human Decision Processes. 1989b;43(1):118-137
- [112] Katz D, Kahn R. The Social Psychology of Organizations. New York: Wiley; 1978
- [113] Homans GC. Social Behavior. New York: Harcourt, Brace & World; 1961
- [114] Blau PM. Exchange and Power in Social Life. New York: Wiley; 1964

- [115] Hellman CM, Witt LA, Hilton TF Member-Team Exchange Quality and Commitment to a Matrix Team. Paper Presented at the Society for Industrial and Organizational Psychology, San Francisco, CA; 1993, April
- [116] Stajkovic A, Sommer S. Self-efficacy and causal attributions: Direct and reciprocal links. Journal of Applied Social Psychology. 2000;30:707-737
- [117] Bishop J, Kuratko DF, Hornsby JS. y Bishop JW. An examination of managers' entrepreneurial actions and job satisfaction. The International Entrepreneurship and Management Journal. 2005;1(3):275-291
- [118] Calnan M, Rowe R. Trust and health care. Sociology Compass. 2007;1:283-308c
- [119] Wright TA. Positive organizational behavior: An idea whose time has truly come. Journal of Organizational Behavior. 2003;24:437-442
- [120] Wagnild GM, Young HM. Development and psychometric evaluation of the resilience scale. Journal of Nursing Measurement. 1993;1(2):165-178
- [121] Scheier MF, Carver CS. Optimism, coping and health: Assessment and implications of generalized outcome expectancies. Health Psychology. 1985;4(3):219-247