

RESEARCH ARTICLE

How Do the Leadership Styles Impact the Performance of Professional Competences in Brazilian Workers? Identifying mechanisms and contextual variables

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Abstract:

The study of the influence of the leadership styles on the behavior of the followers is of great relevance. Leadership is an important function of management which helps to maximize efficiency and to achieve organizational goals. Usually, the performance of followers is influenced by the performance of the leader and his or her behavior acting a job. The aim of this paper is to provide empirical evidence on the impact exerted by the leadership style, if oriented by tasks or oriented by relationship/people, on the performance of 168 Brazilian leaders. Two validated and structured questionnaires were applied. All recommended ethical procedures were adopted. Using multiple linear regression, we confirmed that leadership styles influences individual performance. In the first model, we found that relationship-oriented leadership style and age predicted the performance of behavioral competencies among Brazilian leaders. In the second model, only the relationship-oriented leadership style predicted the performance of technical competencies. Considering the context of heterogeneous teams, the influence of leaders tends to

be predominantly task-based. Leaders need to be better able to deal with differences in the work team, with a focus on conflict management and performance orientation. A limitation of this research was the sample size. The findings have important implications for the organizational studies, leaders and organizations.

Keywords: Leadership styles, Performance at work, Organizational behavior, Professional competences, Technical competences, Behavioral competences

Introduction

The importance of leadership in the workplace has long been studied (Ashford & Sitkin, 2019; Fairhurst et al., 2020). The recent focus on leadership is an international phenomenon, as is increased investment in leadership and management development. In these 'pandemic' days (because of Covid-19), leaders get new challenges and promote business growth.

Leadership is an important function of management which helps to maximize efficiency and to achieve organizational goals by inspiring and motivating (Ford & Harding, 2018; Gilani et al., 2020). Leadership is a critical and valuable management skill (Ospina et al 2020), and every work organization needs leaders to be people and business drivers.

Studies in the field of organizational behavior have been emphasizing the role that leaders play on group performance, especially when it comes to conflict resolution (Shazia, Anis-ul-Haq, & Niazi, 2014), and performance management (Armandi, Oppedisano, & Sherman, 2003; Qi et al, 2019). Leadership theories have historically been developed in an attempt to identify which attributes leaders should have in order to optimize human performance at work (Barbutto, 2005).

The way in which leaders behave, as well as their style of acting (McDermott, Kidney, & Flood, 2011) influence the way in which employees perceive and interact in the organization they work for. Many of the psychological and social beliefs built by individuals have, as a starting point, the perception about the role played by their leader (Bass & Avolio, 1990).

In this paper, we take up the question of how leadership styles influence acquisition of professional competences and subsequent the performance. The role played by leadership is highlighted in the day-to-day work of organizations. In the Brazilian organizational context, it is expected that leaders who work in public organizations will have agility in solving the country's organizational, social and political problems. In the third world, the Brazilian reality is very suffering, with a good part of the Brazilian population in extreme poverty.

In general, leadership is a process of social influence. Leaders stimulate the followers to strive willingly to attain organizational goals and objectives (Villoria & Iglesias, 2011). Leadership serves as a motive power to group efforts (Zaccaro, 2007). The absence of effective leadership no management can achieve the desired results. However, according to Chen and Leung (2016), it remains to be clarified to what extent leadership style influences behavior of those who are led.

Leadership helps to maximize efficiency and to achieve organizational goals (Terry, 1998). Administrative leadership is the process of developing/supporting

followers who provide the results (Fernández, 2008), and aligning the organization with its environment. Leadership involves the exercise of authority and making of decisions (Newman, Guy, & Mastracci, 2009).

Then, according to Javidan and Waldman (2003) and Van Wart (2003), and considering the strategic aspect of having active and representative leaderships in the work scenario, it remains to know: which variables condition the effective performance of an efficacious leadership? How do leaders encourage continuous development on the workers? To what extent does leadership act in stimulating the acquisition and the application of professional competencies, necessary for the work of the ones who are led?

The present study aims to describe if there is a relationship between leadership styles and performance of professional competencies at work in Brazilian leaders that work in a public organization. More specifically, we are going to test whether task-oriented and relationship oriented (person) leadership styles predict the performance of Brazilian public workers. We study individual performance through the application of the competences in work routines according to work goals and expectations of results.

It is expected that the leader act planning and coordination activities, providing the necessary support for the performance of work goals. We believe that the leaders' performance will be essential to the expression of behavioral (focused on distal skills and attitudes) and technical (focused on knowledge and specific skills) competences at work. Without good leaders, the organizations will not reach their missions and objectives.

Considering specifically the Brazilian context, two theoretical models were tested. In the first one we tested the predictive relationship between leadership styles (task-oriented or relationship-oriented) on the leaders' performance of behavioral competencies (based on more distal attitudes and skills). In the second empirical model, we tested the predictive relationship between the same leadership styles on the performance of technical competencies (based on more specific knowledge and skills required for effective job performance). How much do Brazilian leaders believe that the development of their competences impacts their performance? Sex, age, seniority (length of service) and educational level were also included and tested in the context of the two theoretical models.

The current study aims to advance in the field of public administration in two ways. First, although already there are related studies (eg Kremer, Villamor, & Aguinis, 2019; Montezano et al., 2019), studies that explicitly link leadership styles, professional competences and public administration in general are scarce (Javidan & Waldman, 2003). There is not a similar study published in Brazil, considering the variables we tested and, moreover, that incorporate validated competences frameworks as we did here.

We tackle this issue by systematically analyzing the variables using two well-established research instruments with evidence of internal validity and precision. By linking shared perceptions among Brazilian public workers to larger theories of public-sector reform models and human resources, we aim to narrow the often hypothesized gap between Brazilian public administration theories and practice (eg. Liden, Wayne, Liao, & Meuser, 2014). Our research can therefore serve as a guideline for practical and scholars who want to study the relationships between leadership styles and competency performance. We developed a structured and quantitative research, with possible implications for management development and training practices, in general, and considering the Brazilian public employees in particular.

In this regard, this paper is designed to contribute to the debate about the professionalization of the management in public organizations, as well as offer exciting insights for theoretical and managerial lessons by investigating the effect of leaders' competences on their individual performance. Underpinned by the theories about performance and competences view, this study highlights the importance of considering the role of the leaders in the development of their teams, which may contribute to translating the performance of the team into organizational performance.

The discussions in this article are structured by, first, providing a literature review on the importance of the leadership in organizations view as the underpinning theory before delving deeper into the development of hypotheses and the research framework. Competence and performance literature is too presented. Next, discussions on research methodology as well as results and analysis are covered.

The paper proceeds by deliberating on the findings of the study as well as its implications for theory, practical management, and policy. Subsequently, discussions on the limitations and future directions are provided, followed by a conclusion aiming to stimulate new studies based on the results obtained here. We believe that the theme does not end in this article.

Theoretical background

The importance attributed to the figure of the leader in organizations has had consolidated in the field of organizational studies (Gandolfi & Stone, 2018; Kurtessis et al., 2015). Basically, most of scientific studies about leadership consists of the investigation of leaders' attributes and behavior in work situations (Howell & Avolio, 1993; Parris & Peachey, 2013; Yukl, 2012). In the literature, there are different theories about leadership styles (Northouse, 2001). Part of them are based on the theory of traits, and part based on the leadership behavioral theory. There is no a consensus about definitions.

More classic theories, such as that of Lewin, Lippitt, and White (1939), defined leadership styles in three possibilities: 'autocratic', 'democratic', and 'laissez-faire'. In the contingency model of leadership, by Fiedler and Chalmers (1967), leadership may be oriented towards task, relationship, and leader-member hierarchy (focusing on the power of position).

In the Tannenbaum and Schmidt's (1973) continuous leadership model, leadership styles varied between: 'imposing', 'salesman', 'suggestive', 'advisory', 'aggregator', 'delegator', and 'abdicator'. The participation-leader model (Vroom & Yetton, 1973), the leader-member-exchange model (Greene, 1975), and the situational leadership model (Hersey & Blanchard, 1986) were also relevant in the literature.

More contemporary models are also found in the literature, such as the managerial leadership grid (Blake & Mouton, 2000) and the matrix model, by Flamholtz and Randle (2007), based on the analysis of the dichotomy planning/autonomy. It is noted, therefore, that, over time, leadership has been less and less investigated as a personal attribute, and begins to be analyzed more as a phenomenon, in which social and situational aspects determine leader's power of action influence.

The way in which leader's influence is exercised and received by the ones who are led determines several aspects of organizational dynamics (Chen & You, 2016;

Winston & Fields, 2015). Work motivation levels tend to be higher if leadership is present (Kiel & Watson, 2009). An active leader encourages the performance of his followers. Group performance is facilitated when the leader has technical knowledge, and when the group participates in decisions (Hoffman et al., 2011; Kremer, Villamor, & Aguinis, 2019; Liden et al., 2014). The implementation of innovation at work is facilitated when leadership is active (Jaiswal & Dhar, 2015; Silva & Reis, 2016; Tian & Sanchez, 2017).

Work contexts considered to be ‘mentally healthy’ are characterized by leaders active in promoting quality of life and mental health among individuals (Carmeli, Palmon, & Ziv 2010; Hira, Peng, Carmeli, & Schaubroeck, 2012; Choi, Tran, & Kang, 2016; Nembhard & Edmondson, 2006).

Empirical studies on relationships between leadership styles and acquisition and performance of competencies in the context of organizations are still scarce in the scientific literature, and it remains to be explained how leadership contributes to employees’ performance of competencies in organizations (Dong & Sosik, 2002; Montezano, Medeiros, Isidro-filho, & Petry, 2019). This lack of information limits, for example, the creation of organizational mechanisms to support the role of leaders in employees’ development. This happens perhaps because the literature on competence is still quite fragmented, in terms of standardization of theoretical dimensions and empirical models that can explain reality phenomena.

In the context of Brazilian public administration, this research gap is even more evident (Araújo Junior & Martins, 2014; Skorková, 2016). In one of the few multilevel empirical studies dealing with the relationship between leadership’s role and performance of competencies, Brandão (2009) describes that there is empirical evidence showing that aspects related to individual’s perception of organizational support, such as leadership’s support, are conditioning factors of the development and expression of professional competencies.

There is, therefore, an important research gap with regard to the impacts that leadership skills have on the performance of leaders. To what extent does the leadership style of performance impact your performance, and that of your followers? What is the importance of this, from the point of view of scientific research, management and policies? Next, we will develop our research proposals in an attempt to shed light on these issues.

Hypothesis development and research framework

Our research hypothesis is that the leadership styles, considering the sample of Brazilian leaders, will predict the acquisition and performance of professional competences at work. The domain of competences must be performed at goals of work. There is a theoretical linear association between the domain of the competence and its impact in the human performance at work. We believe that the leadership must create organizational conditions to stimulate and encourage the performance of the followers.

The leaders have to be organized, swift and attentive to the impact of their own actions. Therefore, we believe that their styles of management will impact on the expression of their competences among subordinates. This brings us our central research hypothesis:

H1. The task-oriented and relationship/person-oriented leadership styles impact on the performance of behavioral and technical competences in Brazilian leaders.

Leadership is a function which is important at all levels of management. A leader should be very precisely knowing the nature of work of his subordinates. In this article, we assume that performance of competencies will be subject to interpersonal factors, such as social recognition by the teamwork and provision of incentives/compliments by leadership.

We tested two models: the first, based on the premise that leaders whose styles are focused on tasks will tend to promote acquisition and performance of professional competencies in job-related assignments (Burke, Stagl, Klein, Goodwim, Salas, & Halpin, 2006; Bell, Tannenbaum, Ford, Noe, & Kraiger, 2017). In the second model, leaders, whose styles of action are oriented by people development, will impact in the development of more attitudinal and personal competencies (Hondegheem, Horton, & Scheepers, 2006).

It is important to highlight that, in this study, we adopted the classification derived from the contingency theory of Fiedler and Chalmers (1967), based on leadership styles oriented towards task and to people, focusing on maintaining the formal hierarchy of command. According to the discussion made by House (1996), we consider that the task-oriented leadership style may influence the performance of technical competencies in the work environment. Relationship-oriented leadership style, on the other hand, may influence the expression of behavioral competencies, especially those related to the ability to act in favor of the group mindset, and to act with empathy (e.g., Burke et al., 2006).

Madlock (2008) examined the influence of managerial styles oriented towards task and relationship, exercised by supervisors of private companies, on subordinate's communicative competency. The author found that employees' satisfaction was greater when they realized that their leaders were showing behaviors oriented both towards interpersonal relationships and tasks.

Regarding aspects of the work environment that affect the expression of competencies, Sonnentag, Niessen, and Ohly (2004), Lima and Melo (2017), Flores, Coelho Junior, Ferreira, and Martins (2018), and Montezano, Medeiros, Pinheiro, and Oliveira (2019) also suggest that such relationships are found in managerial support, co-workers' support, and organizational climate. Similar studies on the role of leadership in promoting a psychosocial work environment can be found in Lee and Dalal (2016), Rueda, Baptista, Cardoso, and Raad (2013), and Zohar and Tenne-Gazit (2008).

The literature on leadership suggests that it shapes the behavior of subordinates. Psychosocial support, provided by leaders, is a Strong predictor of job performance (Coelho Junior, Rodrigues, Fogaça, Teixeira, & Richter, 2017). Much of the performance of group members is directly related to their leader. If the leader is more participatory and active, performance tends to be more accurate. If the leader is negligent or neglectful, performance tends to be done in a relapse way, which can be reckless.

In light of the contingency theory of Fiedler and Chalmers (1967), each leadership has a very important role in the daily work. It will be up to the leader to encourage the acquisition of work-related competencies, among his team members, assessing, for example, the way they perform their competencies. In addition, the leader should monitor whether individuals share work-related experiences, encouraging social exchanges, aiming at improving the psychological work environment and at enabling the achievement of organizational goals.

Competence has been described as an expected behavior of an individual in the face of a work situation. The complex interaction between knowledge, skills, and attitudes forms the concept of competence. Competence is essentially a behavior expressed by a person in the face of a work situation (Le Boterf, 2003; Coelho

Junior, Hollanda, Santos, Couto, & Faiad, 2016). Due to the need for expression in the workplace, competence is seen as a facilitator of performance (Spencer & Spencer, 1993). Competent individuals will outperform individuals who still need to develop competencies (Sabuharia, Sudirob, Irawantob, & Rahayub, 2020). The analysis of occupational role is essential.

The definition of competence is complex and multifaceted. Human competence consists of three axes formed by the person's attributes (biography), characteristics of educational background, and aspects related to professional experience. Competence is related to knowing how to act in a work situation, in which the individual must possess the knowledge and the skills necessary to perform tasks and foresee expected results (Yazdanfar, Saeid, & Hellgren, 2014). It implies that the individual knows how to mobilize, integrate and apply his resources, in a determined professional context in which there is an expectation of achieving results.

Those competencies directly related to assignments of a position are named 'technical', while those more generic and of an attitudinal nature, are named 'behavioral' (Borges, Coelho Jr., Faiad, & Rocha, 2014; Silva & Teixeira, 2012). Technical competencies alone, however, are not sufficient for good professional performance (Moreno, 2005). Its effective implementation relies, most of the time, on more generic competencies related to the world of work, such as behavioral competencies. These competencies are usually referred as transversal. In this context, ability to organize work and work as a team are examples of transversal competencies.

Materials and methods

Characteristics of the Brazilian organization

In order to address the objectives of this research, this cross-sectional study was conducted through a quantitative survey. We studied the organizational context of the University of Brasilia, located in the capital of Brazil.

The University of Brasilia is a very traditional institution in Brazil. It has several undergraduate and graduate departments. It is a public University, of recognized quality. Its administrative structure is quite large and complex. In the case of this research, for reasons of accessibility, it was decided to restrict the locus to public workers responsible for administrative and people management activities.

They are workers whose competences are essential to the performance of bureaucratic control (such as, for example, recording wages, vacations and bonuses) of each of the University's workers as a whole. The estimated population, at the time when the data were collected, was approximately 1.120 workers. We had a 15% return rate (N=168) on the total number of public employees contacted. They are leaders for, at least, one month.

First of all, we solicited to the University the register of e-mail addresses of all workers who could participate in the research. After accessing the list of emails, the research team has organized the data collection. The two questionnaires of research were digitized and transformed into an electronic version. The questionnaires were sent by e-mail, including a link of access. The workers should click on the link and answered the instruments. The questionnaires used were answered individually. Data collection took place over about two months ago.

Each respondent was asked to evaluate the managerial style considering the role of direct leadership those who were subordinate. It is important to mention that, for data collection, participants were informed that, if they clicked the link to access the survey, they would automatically agree with its terms. By clicking on the survey link, the participant agreed to participate spontaneously in the survey, having prior access to and agreeing with its objectives. All ethical procedures were followed, including agreeing to the Informed Consent Form (ICF). There was no participant personal identification, ensuring total confidentiality and anonymity of the responses. Responses were analyzed grouped. The research team did not know whose given responses were.

Population and sample

Non-probabilistic accessibility sampling technique was adopted. The sample was 168 Brazilian public employees, from the University of Brasília, predominantly between 21 and 40 years old (74.5%, N = 125). Table 1 summarizes the socio-demographic data of the sample.

Table 1. Socio-demographic data

Variable	Distribution	Absolute frequency	Relative frequency
Sex	Male	80	47.6
	Female	88	52.4
	Total	168	100
Age	18-20	3	1.8
	21-30	73	43.5
	31-40	52	31
	41-50	14	8.3
	51-60	23	13.7
	>61	3	1.8
	Total	168	100
Seniority (length of service at Organization)	<1	43	25.6
	1-3	49	29.2
	3-5	30	17.9
	5-10	25	14.9
	>10	21	12.5
	Total	168	100
Education level	Incomplete elementary school	1	0.6
	Complete high school	4	2.4
	Incomplete undergraduate school	21	12.5
	Complete undergraduate school		
	Graduate school (specialization or MBA)	37	22
	Masters	66	39.3
	Doctorate degree and Post-doc		
	Total	168	100

Total	29	17.3
	10	6
	168	100

Instruments of research

The Technical and Behavioral Competencies Questionnaire (TBCQ) assess, by self-report, the importance and domain of competencies in the work setting. This is a validated questionnaire.

There are 29 competencies, divided into two types: technical (16) and behavioral (13). These competencies has had already been mapped by the human resources professionals of the organization where the research. There are competences already used for organizational performance evaluation and training actions.

All people management actions were based on these 29 competencies that the organization itself has had mapped. However, aiming at rigor, the research team decided to carry out semantic validation procedures by judges, once this had not yet been done before.

Redundancies were eliminated by expert judges, who should assess whether the mapped competencies were well described and whether, in fact, they were competencies necessary to performance of the work. Each competency was associated with a 5-point Likert scale, between 1 ('I do not have domain and do not use this competency') to 5 ('I have full control and use this competency'). The main psychometric indicators of the scale were reliability (KMO = .837) and internal consistency rate (alpha = .894).

The Managerial Style Assessment Questionnaire (MSAQ, Melo, 2004) is a previously-validated instrument assesses leadership styles. It consists in 19 items segmented into two dimensions: task orientation and people orientation.

The task factor refers to the leader's attribution of defining roles and responsibilities in the pursuit of achieving goals. The relationship factor refers to valuation of individuality and emphasizes interpersonal relationships, such as guidance and support.

Each item refers to a statement that the respondent should evaluate, in general, based on his current leadership at work. The items were associated with a 5-point Likert scale, between 1 ('never acts or acted like this') to 5 ('always acts or acted like this'). The main psychometric indicators of the scale were reliability (KMO = .873) and internal consistency (alpha = .915).

Procedures of data analysis

Bivariate and inferential statistics were calculated, using the statistical software SPSS version 23.0. Descriptive analyzes included absolute and relative frequencies (percentage), mean and standard deviation of the sample.

Data distribution analysis was performed, using the Kolmogorov-Smirnov test and the Student's t-test, for variables with approximately normal distribution, and the Mann Whitney test, for asymmetric variables. All of these procedures were

adopted according to recommendations of Hair Junior, Anderson, Tatham, and Black (2005).

Variables that had statistically significant differences in the respective tests were included in the multiple regression analysis (enter method), with the purpose of identifying predictive values of variables related to performance of technical and behavioral competencies. Significance level adopted was set at 5% ($p \leq 0.05$).

Four factor scores were calculated, two for leadership styles (one oriented towards tasks and another oriented towards relationship) and two for professional competencies (one for behavioral competencies and one for technical competencies). Age, length of service (seniority) and education were tested as continuous variables. Sex was recoded (0 = Men; 1 = Women). So, to investigate predictions in the of Brazilian leadership styles and the performance of professional competences, we conducted ordinary regression analyses. The results are showed below.

Results and discussion

Initially, an analysis was performed regarding the general distribution of perceived leadership styles and performance of technical and behavioral competencies. Statistically significant differences were identified between education level and performance of behavioral competencies ($F = 2.268$, $p = .040$). Moreover, differences were found between age and performance of behavioral competencies ($F = 3.864$, $p = .003$).

No statistically significant differences were found between education level and age in the performance of technical competencies ($p > .05$). None of the other socio-demographic variables (sex and seniority) has had a difference statistically significant between the groups were tested.

Participants with doctorate degree ($M = 4.29$, $SD = .425$) assessed the style of their leaders as being predominantly relationship-oriented. Among those with lower education level, the task-oriented leadership obtained the lowest scores ($M = 3.67$, $SD = 1.202$).

With respect to performance of behavioral competencies, the highest mean scores were found among those participants with a doctorate degree ($M = 4.34$, $SD = .533$), while the lowest scores were found among participants with incomplete undergraduate school ($M = 3.71$, $DP = .666$). Results were similar, although with lower scores, considering the performance of technical competencies among participants with a doctorate degree ($M = 4.04$, $SD = .489$) and incomplete undergraduate school ($M = 3.71$, $SD = .529$).

Participants between 18 and 20 years old presented the lowest mean for performance of technical competencies ($M = 3.71$, $SD = .937$). The highest means for the performance of these competencies were found among participants aged 41 to 50 ($M = 4.12$, $SD = .429$) and 31 to 40 ($M = 3.90$, $SD = .376$).

Considering the performance of the behavioral competencies, participants between 41 and 50 years old presented the highest mean ($M = 4.12$, $SD = .592$). The lowest mean was obtained among participants between 51 and 60 years old ($M = 3.40$, $SD = .662$).

With respect to leadership style, participants between 51 and 60 years old did not seem to prefer taskoriented leadership, once they presented the lowest mean in terms of the analysis of this attribute ($M = 3.58$, $SD = .118$). The younger ones presented higher means in relation to this leadership style (between 18 and 20 years old, $M = 4$, $SD = .621$).

Considering the people-oriented leadership styles, the highest mean was found among participants aged between 18 and 20 years old ($M = 4.36$, $SD = .160$) and 41 to 50 years old ($M = 4.30$, $SD = .447$). The lowest mean ($M = 3.87$, $SD = .674$) was also found among participants aged 51 to 60 years. It seems that the role of leadership, whether task-oriented or people-oriented, is perceived as less important by older participants compared to younger participants. Interestingly, the role of leadership is perceived more positively among younger participants.

According to our research expectations, it was found that relationship-oriented leadership style ($\beta = .316$, $p = .001$, and age, $\beta = -.203$, $p = .001$), predicted the performance of behavioral competencies by Brazilian leaders. No statistical significance was found for task-oriented leadership style and performance of behavioral competencies. Results are summarized in Table 2.

Table 2: The impact of leadership styles tasks-oriented and people-oriented on performance of behavioral competencies among Brazilian public employees.

Variables in the model	Standardized coefficients	Nonstandard coefficients			
	B	Standard error	β	t	Sig.
Constant	3.709	.393	---	9.434	.000
Tasks-oriented leadership	-.139	.085	-.139	-1.636	.104
Relationship-oriented leadership	.273	.074	.316	3.693	.000*
Education level	-.190	.100	-.156	-1.892	.061
Age	-.280	.115	-.203	-2.427	.017**
Seniority (length of service)	-.049	.039	-.111	-1.263	.209

Note. Multiple regression analysis (Enter method); criterion variable: performance of behavioral competencies; adjusted $r^2 = .152$ (15.2%); * $p < 0,001$, ** $p < 0,005$

These results reinforces the leadership's situational influence on performance, once employee's performance of competencies seems to be influenced by interpersonal and social relationships established by the leader (Dong & Sosik, 2002; Lee & Dalal, 2016). The performance of the leader in the management of the organizational context is very importance, and is positively evaluated by the followers. The strong social cohesion of the members of the team is a good indicator of the presence of the positive leaders.

Considering the results we obtained of in the second model, unlike what we had expected, the results showed that only the relationship-oriented leadership style predicted the performance of technical competencies ($\beta = .370$). No statistical significance was found for the task-oriented leadership style and the performance of technical competencies at work. Results are summarized in Table 3.

Table 3. The impact of leadership styles tasks-oriented and people-oriented on performance of technical competencies among Brazilian public employees.

Variables in the model	Standardized coefficients	Nonstandard coefficients			
	B	Standard error	β	T	Sig.
Constant	2.819	.279	---	10.113	.000
Tasks-oriented leadership	.046	.060	.065	.768	.444
Relationship-oriented leadership	.228	.052	.370	4.357	.000*
Education level	-.120	.071	-.138	-1.688	.094
Age	.041	.082	.042	.499	.619
Seniority (length of service)	-.008	.028	-.024	-.273	.786

Note. Multiple regression analysis (Enter method); criterion variable: performance of technical competencies; adjusted $r^2 = .163$ (16.3%); * $p < 0,001$

Regarding the attributes of the people-oriented leadership style, communication and empathy skills are important and essential to the exercise of leadership. With respect to the task-oriented leadership style, technical knowledge needs to be an essential condition for the exercise of leadership. ‘Knowhow’ and ‘know why’ must be constant in the relationship between leadership and subordinates (McDermott et al., 2011; Winston & Fields, 2015).

Our study has shown that the framework is applicable from the perspective of the theory of contingency, that considers the intense influence of the leader on his team. Leadership has a fundamental importance and the development of their competencies, whether technical or behavioral, is essential for the performance of the group and the organizations.

We reformed that the results of this research confirm the importance of exercising leadership in a group, highlighted by Choi et al. (2016) and Winston and Fields (2015). The role of the leader should not only be focused on achieving work results, but also on motivation and on organizational climate (Yukl, 2002; Zohar & Tenne-Gazit, 2008). The results that were found in this research suggest that the performance of technical competencies seems to be dependent on the leader’s social / emotional competencies (Barbuto, 2005).

The results of this research suggest that participants who are more willing to express their knowledge and skills about a certain function also express their personal characteristics and attitudes, as well as believe that such expressions are important in the work environment (McDermott, Kidney, & Flood, 2011; Shazia, Anis-ul-Haq, & Niazi, 2014; Yazdanfar, Saeid, & Hellgren, 2014). Leaders with flexible performance, that adjusting their behavior according to the needs of their subordinates, tend to have greater specific emotional skills in their performance (Hirak, Peng, Carmeli, & Schaubroeck, 2012; Hoffman, B. J., Woehr, Maldagen - Youngjohn, & Lyons, 2011; Lee & Dalal, 2016; Liden et al., 2014).

The results were according to findings of Hersey and Blanchard (1986), Jaiswal and Dhar (2015), Gandolfi and Stone (2018) and Kremer et al. (2019), who point out that situational leadership is based on the interaction between the amount of

guidance and direction that the leader offers, and subordinate's readiness level to perform a task, function or objective.

The presented results suggest that autonomy, creativity and solution of problems can be pointed out as important advantages of the atuação of the leaders, resulting from managerial performance in the decision-making process (Tingting, Li, & Leung, 2015; Hoffman et al., 2011). Moreover, autonomy can promote well-being and job satisfaction (Choi et al. 2016; Hirak et al., 2012; Nembhard & Edmondson, 2006), as well as facilitate individual job performance (Dong & Sosik, 2002). Positive attitudes towards coworkers imply individual's responsibility to build a healthy work environment (Qi et al., 2019; Lee, & Dalal, 2016; Zohar, & Tenne-Gazit, 2008).

The findings of this research lead to the conclusion concerning the importance of management development programs in the Brazilian public sector (Araújo Júnior & Martins, 2014; Coelho Junior, Hollanda, Santos, Couto, & Faiad, 2016; Coelho Junior, Rodrigues, Fogaça, Teixeira, & Richter, 2017; Silva & Reis, 2016; Skorková, 2016). Current public leaders must strive on the search for good governance practices, with a focus on achieving results and developing people (Montezano et al., 2019).

The results also allow us to affirm that the training of leaders is a practice of extreme relevance to organizations (Carmeli et al., 2010). The leader is responsible for managing the team, influencing, and motivating employees towards organizational goals (Barbuto, 2005; Silva & Reis, 2016). Sharing ideas and group cohesion may even contribute to the acquisition of technical competencies related to attributions and responsibilities.

Work results involves the development of human competencies. Organizational objectives will be achieved when there are trained leaders and when those who are led have professional competencies necessary for effective performance. The development of each group member is an expected task in leadership performance, regardless of the style.

Our study has provided empirical evidence that leadership behavior is able to influence the performance of the work team members (Qi, Liu, Wei, & Hu, 2019; Tian & Sanchez, 2017). It will be up to the leader to meet the goals and expectations of the team, developing actions to motivate and influence the followers, in an ethical and positive way (Tingting, Li, & Leung, 2015). The performance of the leaders contributes to the achievement of the organizational objectives (Parris & Peachey, 2013).

Every leader must inspire and accompany his team, including evaluations and feedbacks (Northouse, 2001). Leader is the person capable of leading his team to a performance and result that would not be possible without his performance; someone capable of changing history with their actions (Ospina, Foldy, Fairhurst, & Jackson, 2020). Our article demonstrated that it is very important to understand the effects of the leader's performance, through his acting style, on the team members. People management area will benefit if the leaders are trained to 'be a leader'.

Considering that our empirical research was made in a Brazilian public organization, we demonstrated that the role of leaders is also fundamental in the public sector, specially the Brazilian one (Montezao et al., 2019). We believe, according to Madlock (2008) and Winston and Fields (2015), that the governance practices (compliance) will only be performed if leaders are well prepared to act and respected the influence of contextual and individual variables on their action.

From a theoretical point of view, our article demonstrated that the Brazilian context needs to be further studied in the field of leadership research. It is

interesting to identify the perception of organizational justice, for example, on the part of the followers, with regard to the judgment of the leader's performance. Does the leader treat his followers in an isonomic way or does he have individual preferences? The recent empirical theory on leadership has considered the importance of mapping the beliefs and convictions of the followers in relation to the performance of their leadership.

Leadership must be understood as a complex phenomenon, as the effective leader, in addition to technical skills, needs to develop emotional intelligence to manage employees and the team, in addition to being able to develop their team members meeting personal and professional expectations. The leader must act by aligning individual interests and expectations with the interests of work organizations (Armandi, Oppedisano, & Sherman, 2003).

Our article contributed to the literature since it diagnosed, among Brazilian workers, their perceptions about the performance of their leaders. This diagnosis is very important because when the leaders has a good performance the Brazilian society is benefited.

With regard to implications for management, our article demonstrated that without a specific goal, it will be very difficult to contribute to the result being achieved (Burke, Stagl, Klein, Goodwin, Salas, & Halpin, 2006). Thus, the leader must have technical knowledge in the elaboration of the work goals together with his followers (Nembhard & Edmondson, 2006). This communication is essential for the whole team to know the expectations of the leader (Newman, Guy, & Mastracci, 2009). The leader also needs to consider whether the employee is able to perform the task as their expectations. It does not help to delegate something that the person does not feel capable of accomplishing. At this time, the role of the leader is to motivate the followers (Villoria & Iglesias, 2011) and provide support to their limitations or doubts. The leader needs to listen to the expectations of his followers, adjusting his action in favor of the collective objective (Zaccaro, 2007).

From the policy perspective, our study provides lessons for policymakers to develop training and leadership training actions, especially relating their performance to the achievement of organizational results (Van Wart, 2003). It is necessary to measure the effectiveness of the leadership's performance in the context of public administration (Montezano et al., 2019; Villoria & Iglesias, 2011). It is important to develop actions, in government schools, aiming at improving the performance of the leaders. In what situations do leaders deal better with adversity? What are your strategies for planning and evaluating your actions? How does the leader evaluate himself? It is important to create government policies for continuous training of leaders and the study of the social, financial and political impact of their interventions.

It is very important that policymakers also consider the collective realization of the interests of Brazilian society. Developing leaders has an impact on the quality of services provided to the population, and makes it possible to achieve efficient results. In addition to the professionalization of management, developing leaders requires a social commitment to improve the living conditions of the Brazilian population.

Public administration in Brazil still needs to advance a lot in several aspects of its management (Lima & Melo, 2017). The search for good governance practices encourages management activities to be closer to people's real interests. It is not an easy task, considering that in Brazil there are more than 200 million people. Regional differences are very marked, and public policies are not always able to reach all people. However, there is a need for social management concerned with

the well-being of the population in general, in which work and resources are directed towards promoting the quality of life of the Brazilian population.

Limitations and future research

Our study has a few limitations. First, we highlight that this research was cross-sectional and based on human perceptions. It may be that, with a longitudinal design, other variables, disregarded in this research, could have emerged and influenced the opinion of the participants. Longitudinal research could have captured other elements that the survey was unable to capture. The focus of the survey consisted of a descriptive and inferential analysis of the researched phenomenon. The longitudinal approach could have enriched the results, complementing them with a quasi-experiment for example. Historical series could have enriched the survey data.

Another limitation refers to the use of self-reported, self-referring or perceptual measures in one specific organizational environment. It may be that there was an influence of subjective biases in the answers given, either through the phenomenon of leniency (individuals overestimating their opinions) or through severity (individuals evaluating more rigorously than what they actually experience in reality). These biases may have influenced the pattern of responses in the surveyed sample.

The use of secondary data, from the researched organization itself, could have been done. However, access to any statistical data that the organization itself has was not allowed, so we do not analyze secondary data. Other methodological approaches, such as direct observation, participatory research and document analysis, could also have been used if the research team had the autonomy to do so, which did not happen.

For future studies, it is recommended to use the longitudinal approach as the research's time frame. It may be that the longitudinal approach is able to capture typical nuances of everyday organizational life, which the cross-sectional approach was unable to capture. Qualitative techniques for gathering information may even be incorporated, such as participant observation, in-depth interviews or focus groups. It is believed that the qualitative technique will allow deepening the interpretative analysis of results that the quantitative technique, by itself, could not capture.

Moreover, it is recommended that other organizational behavior variables be incorporated into the empirical research scope. One of the possible variables refers to the configuration of the work groups. What will be the influence of group size, and of its cohesion among its members in the leadership style adopted by leaders? Do groups in which the sense of trust is higher present performance of technical and behavioral competencies more frequently, compared to more heterogeneous work groups? Will autonomy for action depend on the leadership style of each team? Does this influence the results of the group itself? What is the influence of the organizational climate on the leadership style adopted?

These are examples of empirical issues that still need to be researched in the context of leadership styles and the performance of professional competencies in the work setting. Other research should focus on the qualitative study of how the influence of the leadership's performance impacts the individual and group performance.

The role of emotions, in the relationship between leaders and followers, also needs to be investigated. The organizational climate needs to be considered as a possible mediating or moderating variable in the relationship between leadership style and competency performance. Finally, it is recommended to study the impact of the performance of professional competences on organizational performance, and to understand, qualitatively, how this relationship happens.

Conclusion

The main objective of this study was to identify predictive relationships between leadership styles, whether task-oriented or oriented towards interpersonal relationships, on performance of technical and behavioral competencies in a sample of Brazilian public employees. This objective was fully achieved, once the two predictive models found pointed out relationships between managerial styles and performance of professional competencies.

In order for the research objective to be achieved, a survey was carried out with 168 leaders of University of Brasília. In this survey, two previously-validated research questionnaires were applied: one about leadership styles (with two dimensions, task-oriented and relationship-oriented), and other about the performance of technical and behavioral competencies (applied in work routines).

After data collection, descriptive and inferential statistical analyzes were performed. These analyzes demonstrated how the sample investigated perceived their leadership styles on the application of competencies in their work routines.

Two empirical models were tested: one, in which performance of behavioral competencies was predicted by two antecedent variables: leadership style oriented towards relationship and age; and the second model, in which the performance of technical competencies was predicted only by relationship-oriented leadership style.

Both empirical models presented significant statistical indices. The results of this research demonstrated that leadership styles influences performance of professional competencies. The role of leadership in the performance of professional competencies is fundamental.

Our general research hypothesis was corroborated. This way, leadership characteristics, such as the ability to teach, learn, and organize work, when necessary, need to be present in their performance. Management decision-making processes need to take into consideration the expectations and motivations of group members. Organizations need to elaborate management development programs more systematically, enabling them to encourage the acquisition and expression of work-related competencies.

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