Culture and behavior of controllership leaders in Brazilian companies: An important relationship?

Cultura y comportamiento de los líderes de la controladuría en empresas Brasileñas: ¿una relación importante?

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Abstract

Behavior of individuals and culture of organizations seem to explain their management models and their performance. This research investigated the interplay between the elements of organizational culture and the behavior of leaders in the area of controllership of large companies in Brazil. The population was composed of the 500 largest companies in Brazil as listed in the “Maiores & Melhores” specialized magazine, which had professional respondents in management positions in the controllership area. Data collection was performed through a questionnaire validated by six experts in the field. The final sample registered 53 of valid returns, collected in the period between August and October of 2019. Data were analyzed using descriptive statistics and Pearson’s correlation (SPSS software). The findings revealed that there is a significant relationship between elements of organizational culture and those linked to the behavior of leaders in the controllership area, mainly: i) among manager motivation, planning, execution and organizational control; ii) manager stress and planning, execution, control, technology and information systems, performance evaluation process and characteristics and skills of the company’s managers; iii) conscientiousness (manager), technology and information, communication and control systems.

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Resumen

El comportamiento de los individuos y la cultura de las organizaciones parecen explicar sus modelos de gestión y su desempeño. Esta investigación investigó la interacción entre los elementos de la cultura organizacional y el comportamiento de los líderes en el área de control de las grandes empresas en Brasil. La población estuvo conformada por las 500 empresas más grandes de Brasil, enumeradas en la revista especializada “Maiores & Melhores”, que contó con profesionales encuestados en puestos gerenciales en el área de contraloría. La recolección de datos se realizó mediante un cuestionario validado por seis expertos en la materia. La muestra final registró 53 de declaraciones válidas, recolectadas en el período comprendido entre agosto y octubre de 2019. Los datos se analizaron mediante estadística descriptiva y correlación de Pearson (software SPSS). Los hallazgos revelaron que existe una relación significativa entre los elementos de la cultura organizacional y los vinculados al comportamiento de los líderes en el área de contraloría, principalmente: i) entre la motivación, planificación, ejecución y control organizacional de los gerentes; ii) estrés gerencial y planificación, ejecución, control, tecnología y sistemas de información, proceso de evaluación del desempeño y características y habilidades de los gerentes de la empresa; iii) Conciencia (gerente), tecnología y sistemas de información, comunicación y control.

Código JEL: M1, M100
Palabras clave: cultura organizacional; comportamiento; control

Introduction

The reasons why companies in the same segment, often similar in their structures, present different levels of performance may be based on the distinctions of standards in their administratives models, in the way human resources are managed and in terms of their internal environment. Culture, derived from people’s behavior, can be an influential factor in the management of external and internal environments, perhaps “greater than all the factors most frequently discussed in business literature - strategy, organizational structure, administrative systems, financial analysis, leadership, etc.” (Kotter & Heskett, 1992, p.10).

This aspect is highlighted by classic authors who dedicate themselves to studies of organizational management, such as Lapierre (1990, p.127), for whom culture can be understood from the fact that “the personality of individuals in management positions has a undeniable influence on how to manage companies.” Thus, the performance of a company is the product not only of the management of environmental variables, but, above all, of the factors that stimulate its existence and continuity, composed by the set of personal characteristics, values beliefs and motivation of its leaders (Lapierre, 1990; Hartnell et al, 2016). The culture of a company is strongly aligned with the personality traits of individuals (Schein, 2004; Hofstede & McCrae, 2004; Quigley , 1963), thus showing certain patterns of actions, beliefs and
thoughts that are necessarily taken to organizations (Quigley, 1963). The literature on the organization’s culture, fundamentally related to its management, shows elements that can help in the understanding of its model, such as organization, planning, execution, control, technology and systems, performance and characteristics of people (Gerrig & Zimbardo, 2002; Griffin & Moorhead, 2010; Reginato & Guerreiro, 2011; Feist; Feist & Roberts, 2013).

It also includes the study of individual and collective behavior in the company, which can clarify the factors affecting the way managers perform their functions. The behavioral field describes the human context and defines opportunities, problems and associated challenges (Griffin & Moorhead, 2010). Studying the conceptual models that assist in understanding the complexity of organizational behavior comprises perceiving the relationships present in the workspace, its constituent elements and its implications for human behavior, describing the reasons that motivate individuals to act proactively. The psychology strand aims to support the unveiling of the nuances of individual behavior to enhance positive traits and minimize negative ones, which, in turn, have some adverse effects on the organization in which the individuals work (Gerrig & Zimbardo, 2002). Personality theories support individual behavior and deserve to be exalted in this study, especially the model of Eysenck (1952, 1982), according to which there are individuals who are more participatory, others are more organized, creative, etc., which can boost management styles and influence the company’s culture.

Research aimed at understanding the behavior of the company’s manager, specifically those linked to the behavior of accounting professionals (e.g., CFOs, Accountants) has been supported by behavioral theories. There are also studies that focus on the profile of investors, accountants and auditors. However, there is a space to deal with the professional who occupies functions related to controllership, the central focus of this research. In the midst of this context focused on culture and behavior, the objective of this study emerged: to investigate the interplay between the elements of organizational culture and those linked to the behavior of the leaders of the controllership area of companies.

The results generated by the research can contribute to a better understanding of the characteristics of the controllership leaders, as well as for companies to manage their resources effectively, as the behaviors become evident in the variables studied here.

The study is structured in four parts, in addition to this introduction. In the next section, the literature review is presented, followed by the adopted methodological procedures. Then, the analysis and discussion of the results will be presented, as well as the final considerations.
Literature review

Organizational culture

Studies on organizational culture emerged in a massive way in the 1980s and quickly became popular after that period. In this list, it is possible to highlight: those of Hofstede (1980) who analyzed the perspective of different countries in order to validate the results; Ouchi (1982), who made a comparison between cultural characteristics in American and Japanese companies; Deal & Kennedy (1982), who explored the influence of values on the organization’s structure; Peters and Waterman Jr. (1982), who reiterated, mainly, the content of the beliefs; Kanter (1983), who studied the transformations of individual postures that occurred in American companies; Schein (2004), who went beyond the observation of behaviors, prioritizing the learning of groups and the idea that there are cultures with peculiar functions.

For Thévenet (1989, p. 22), companies that have strong cultures “are characterized by having value systems with great influence on behaviors and forms of management”, and are coherent and original in decisions and in their ways of functioning. In the meantime, values appear as central elements of the company’s culture. The organizational culture provides meaning to the actions of employees, so successful organizations can have strong managerial values that guide the behavior of individuals and conduct in business. Thus, organizational culture translates the common values and beliefs of an organization's employees, constituting the concept of their behaviors and reactions to many organizational activities and convictions (Tang, 2019).

In the meantime, values appear as central elements of the company’s culture. Values represent basic convictions composed of perceptions, attitudes, motivations, personality, aptitudes, skills, among other variables, important for understanding people’s behavior, including at work. (Gibson, Ivancevich & Donnelly, 1988; Robbins, 2006).

Schwartz (1994) presented relevant types of values, classifying them into four structures: self-transcendence (universalism and benevolence); conservation (conformity and tradition); self-reinforcement (power, achievement and hedoism), and openness to change (self-direction and stimulation). In the case of the latter structure, Pettigrew (2007) stated that the culture adjustment process must take into account the context and content, thus involving the company’s economic, technological, social, structural and political environment.

From the perspective of Schein (2004), culture consists of basic assumptions that a group invented, discovered or developed when learning how to deal with the problems of external adaptation and internal integration, and which worked well enough to be considered valid and taught to others members as the correct way to perceive, think and feel about these problems.
Berson, Oreg & Dvir (2005) concluded that culture promotes organizational performance and that it is formed by the values of these CEOs. According to Ginevicius & Vaitkunaite (2006), the dimensions of culture take on a broad form, which may include communication, management styles, strategies and goals, cooperation, innovation, adaptation, norms and rules, climate, power, vision, mission, autonomy (Lee & Jin, 2022) among others. Ahmed & Shafiq (2014) concluded in their study that the dimensions of culture influence different perspectives of the organization, significantly the interdependence of management controls (Malmi et al., 2020). However, Malmi et al. (2020) suggest, in research conducted in western cultural regions, that caution is needed when generalizing the impact of culture on management practices.

There are other studies that have connected corporate culture, values and norms to elements such as hierarchy and groups, and mainly to organizational performance (Chatman et al., 2014; Morgan & Vorhies, 2018), as well as ensuring that culture conditions behavior and behavior influences culture, promoting conditions to face problems and improve performance (Fellows & Liu, 2013).

Schein (2004) stated that culture emerges from three sources. One concerns the beliefs, values and premises of the company’s founders; the second refers to the learning experiences of the group members and their involvement within the organization, and the last source is linked to new beliefs, values and premises incorporated by new members and leaders, which is explained by the fact that the company system is changeable and constantly adapting its processes to the environment in which it is inserted.

In international business management, companies with foreign investment are susceptible to the cultural conditions of the company’s country of origin, in this sense, studies point to the adoption of hybrid people management practices, considering the external and local culture (Ge & Zhao, 2020; Muhr, Holck & Just, 2022).

To achieve success in his purposes in the business environment, the individual, as a manager, establishes a model for his management, according to which he will lead his team towards the goals to be achieved. At that moment, the company’s management model emerges, strictly aligned with its individual and collective culture and behaviors.

Business management models seem to have been, first of all, supported and systematized amid the philosophical bases of scientists and philosophers, such as René Descartes, Isaac Newton and Francis Bacon, whose thoughts had a marked importance in the culture from which administrative theories emerged, influencing the construction of industrial society. Fayol (1989) already summarized the essential elements of management as being forecasting, organizing, commanding, coordinating and controlling.

Stoner & Freeman (1985) and Daft (2004) developed the idea that an administration should stick to planning, organization, leadership and control. Robbins (2006) brought the same elements exposed by
his precedents, classifying them in planning, organization, leadership and evaluation. With this same approach, Steiner and Miner (1981) treated the elements of management.

Koch (2007) developed a management philosophy, which mirrors a company’s management model according to five dimensions: vision; virtues and talents; knowledge processes; decision-making and incentives. Cummings & Worley (2005) exposed a model to diagnose the organizational system, classifying it in three levels: organizational, group and individual. Each has components that make it possible to analyze and issue final products.

From the analysis of the aspects treated in management models, analyzed and presented in Table 1, Reginato and Guerreiro (2011) dealt with the relationship between organizational culture and management control systems, whose elements can be contemplated: i) Organization: definition of the roles and responsibilities of each person in the company, power and authority, centralization and decentralization, management styles, organization chart; ii) Planning: the characteristics of the company’s planning process, its formalization, dissemination of selected strategies among managers, association between budget and planning and the degree of participation of managers in this process; iii) Execution: how the planned activities are carried out, involving the manager’s degree of autonomy, prioritization of objectives and whether the budget is used as a parameter to evaluate performance; iv) Control: how the results are monitored in relation to those planned, involving the understanding of the degree of commitment of the management and the accountability process; v) Technology and information systems: how these elements are used in the company to support its processes; vi) Performance evaluation process: the adoption of a formal performance process in the company, both global and individual; vi) Characteristics and skills of managers: the characteristics of the academic and professional training of managers and their technical capacity.

Table 1 shows the basis of this model, considering the main classic authors, chosen for the respective construct.
Table 1
Theoretical basis of the culture construct

<table>
<thead>
<tr>
<th>Elements</th>
<th>Theoretical basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>Simon (1965); Litterer (1970); Likert (1975); Robbins (2006); Scalan (1979);</td>
</tr>
<tr>
<td>Planning</td>
<td>Ansoff (1965); Ewing (1968); Ackoff (1970); Robbins (2006); Gehrking (1997);</td>
</tr>
<tr>
<td></td>
<td>Porter (1999); Anthony &amp; Govindarajan (2002); Mintzberg (1994).</td>
</tr>
<tr>
<td>Execution</td>
<td>Ackoff (1970); Hrebiniai (2005).</td>
</tr>
<tr>
<td>Control</td>
<td>Ackoff (1970); Anthony &amp; Govindarajan (2002); Oliveira (1999); Pocket Mentor</td>
</tr>
<tr>
<td></td>
<td>(2006); Folkman (2006).</td>
</tr>
<tr>
<td>Information technology and</td>
<td>Woodward (1965); Murdick &amp; Ross (1975); Glautier &amp; Underdown (1976);</td>
</tr>
<tr>
<td>systems</td>
<td>Steiner &amp; Miner (1981); McGee &amp; Prusak (1994); Stair (1998); Barbieri (2001);</td>
</tr>
<tr>
<td></td>
<td>Moscove, Simkin &amp; Bagranoff (2002); O’Brien (2004);</td>
</tr>
<tr>
<td>Performance</td>
<td>McGregor (1960); Hampton (1990); Hersey (1974); Taylor (1995); Davis &amp;</td>
</tr>
<tr>
<td>evaluation process</td>
<td>Newstrom (2002); Skinner (2003); Amabile &amp; Kramer (2007).</td>
</tr>
<tr>
<td>Characteristics and</td>
<td>Schermerhorn Jr, Hunt &amp; Osborn (1999); Anthony &amp; Govindarajan (2002);</td>
</tr>
</tbody>
</table>

Source: elaborated by the authors.

However, understanding the concept and evolution of the organizational culture, may not be enough to achieve success in this theme. It is also necessary to analyze the organizational and individual behavior, the theme of the next item. Furthermore, Hofstede and McCrae (2004) defended the existence of a correlation between personality traits and cultural dimensions, as proclaimed by Quigley (1963).

**Organization and individual behavior**

Organizational behavior (OB), a subject in the field of study of human behavior in the organization (Griffin & Moorhead, 2010).

Classifying and determining the elements of organizational behavior allows us to understand their relationships. In this sense, the proposed models are presented (Gerrig & Zimbardo, 2002; Griffin & Moorhead, 2010; Feist, Feist & Roberts, 2013) that determine the classification and elements of organizational behavior, namely: a) individual process and b) interpersonal process. As theoretical support, predominantly theories of personality and OB - Organizational Behavior. Hofstede & McCrae (2004) defended the existence of a correlation between personality traits and cultural dimensions, as proclaimed by Quigley (1963).
Individual process

Motivation

For Robbins (2006, p. 151), “motivation is the process responsible for the intensity, direction and persistence of a person’s efforts to reach a certain goal”. Several theories have been created in order to understand how motivation is perceived and developed by individuals, such as the theory of two motivational factors, the theory of the hierarchy of needs, theory X and theory Y and theory of expectations (Robbins, 2006).

The manager’s performance is influenced by the constant interaction of perceptions, emotions and motivation resulting from episodes recorded at work, managerial acts, recognition or attributed incentives and other aspects. The impacts noted on people’s perceptions, emotions and motivation occur when there is interaction among people in which, for example, the manager praises the subordinate, collaborates with him as if he were a colleague, makes the environment more pleasant and offers emotional support. Discussions among team members, meetings, appreciation of ideas, involvement in projects, achievement of goals and rewards, as well as any and all forms of incentives have an impact on the overall performance of the company (Amabile & Kramer, 2007).

Stress

In 1936, Selye launched what was called the general adaptation syndrome, consisting of three phases (alarm reaction, adaptation phase, exhaustion phase) and with a clear biological dimension. This process was the object of studies and research, with emphasis on the systematization of Vasconcelos (1992) on the interconnections between cerebral cortex, hypothalamus, pituitary, adrenal glands and the resulting biochemical changes in the organism. To conceptualize, classify and base this behavior variable Lazarus & Folkman (1984); (Bertalanffy, 1977); Marlach & Jackson (1981); Sloan & Williams (1988) launched concepts that emphasize the relevance of the stress factor in the business environment.

Stress at work contributes to inefficiency, high turnover of people, increased health care costs, accidents, decreased quality and quantity of production (Jex, 2014; Sadir & Lipp, 2009).
**Decision making**

For Simon (1965) the efficiency in a company increases as less hierarchical levels exist through which an issue must pass until its final decision. The author’s guidance is for simplification, made possible through a process of decentralization of decisions. Vecchio (2006), in contrast, explained about the possible disadvantages associated with decentralized structures.

Brousseau et al. (2006, p. 55) contributes by indicating the following styles: decided manager; hierarchical; flexible and integrative. A manager can act at levels interspersed between one style or another, be simultaneously authoritarian and consultative, authoritarian in decision-making and consultative in the relationship with his subordinates (Likert, 1975).

**Extroversion, openness to experience and conscientiousness**

These elements are part of the Eysenck’s five-factor model. The dimensions of the model were derived from collections in the 1960s, using different samples and classifications (Gerrig & Zimbardo, 2002). Gerrig & Zimbardo (2002) demonstrate the dimensions of the five-factor model. Extroversion concerns the definitions of communication, energy, assertiveness, shyness and reserved behavior; the openness to experience is composed of creativity, intellectuality, depth, intelligence, open and simple mind; and conscientiousness encompasses organization, responsibility, caution and fear, instability and irresponsibility. Bueno, Oliveira & Oliveira (2001) developed research that correlated skills and personality traits. The results showed a significant relationship between coping with risk and extraversion. Being aware of this, it can be inferred that individuals (managers), contemplated by extroversion traits may present a greater tendency to risk or complex decisions.

**Interpersonal process**

**Teams**

A working group points to how individuals perceive and are perceived by others as a social entity, interdependent because of the tasks they perform, and inserted in a larger social system, the organization, which is affected by the group’s performance (Guzzo & Dickson, 1996).

Arrow, McGrath & Berdahl (2000); Tosi, Rizzo & Carroll (1995); Nadler, Hackman & Lawler (1983) complemented the construct of this behavioral variable, emphasizing that teams should be focused
on the company’s planning, as they are the ones that promote organizational performance. In this direction, it is healthy to invest in the development of people, especially in the relationships they cultivate among them.

**Communication**

The communication discussion considers the information resource, as it is its main aspect of analysis. Glautier & Underdown (1976) stated that one of the merits of information is to provide the company with conditions for its managers to make appropriate decisions, through the efficient use of other resources, such as the human, the technological and the physical, which make up their company. The reasoning of authors is corroborated by McGee & Prusak (1994) and Murdick & Ross (1975). Along this line, authors such as Moscove, Simkin & Bagranoff (2002) were also explored. For all of them, information is directly linked to the way it is communicated.

According to Weick (1979) and Kreps (1990) communication consists of the central process and the source of a company’s information. The definitions of organizational communication are divided into internal and external and formal and informal (Heide, Johansson & Simonsson, 2005) and involve the effectiveness and strategy of organizational relationships.

**Leadership: the role of the leader**

Drucker (1977) stated that many business failures are the result of ineffective leadership. According to him, leadership is a phenomenon of personal influence exercised in a given situation through the process of human communication, and the behavior of the leader involves multiple functions, such as: planning, informing, evaluating, controlling, motivating, recovering, punishing, etc.; to lead is essentially to guide the group, people, towards certain objectives or goals (Barnard, 1971).

Studies by authors like Lindzey (1940), for whom the leader is an important influencer in the company; White & Lippitt (1960), who discussed leadership roles (autocratic, democratic and laissez faire); Likert (1975), who characterized the administration system as authoritarian-strong, authoritarian-benevolent, participatory-consultative and participatory-group, supported the construction of the research. Leadership style, organizational culture, HR quality and job satisfaction, according to surveys by Fachri, Paminto & Effendi (2021) had a significant impact on the performance of collaborating employees.
**Negotiation**

Negotiation is the communication process with the purpose of reaching a pleasant agreement on different ideas and needs, which can affect any type of relationship, positively or negatively (Nierenberg, 1981).

For this issue, the concepts and studies by Fischer et al. (2005); Hirata (2007); Silveira (2006) and Calegari & Gemignani (2006); Keirsey (2019); Keirsey & Bates (1984) contribute, given that who deal with stages and methodologies of negotiation in companies, and fundamentally with the importance of developing managerial skills that allow them to achieve maximum efficiency in negotiation.

**Table 2** aims to summarize the references that served as a basis for the elaboration of the construct linked to the manager’s behavior.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Theoretical basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>Robbins (2006); Amabile &amp; Kramer (2007).</td>
</tr>
<tr>
<td>Communication</td>
<td>Weick (1979); Kreps (1990); Heide, Johansson &amp; Simonsson (2005).</td>
</tr>
<tr>
<td>Leadership</td>
<td>Barnard (1971); Drucker (1977); Likert (1975).</td>
</tr>
<tr>
<td>Negotiation</td>
<td>Nierenberg (1981); Fischer et al. (2005); Keirsey (2001).</td>
</tr>
</tbody>
</table>

Source: elaborated by the authors.

Analyzing the concepts presented in the theoretical framework, the main elements related to organizational culture and the characteristics of individual and interpersonal behavior are now presented and discussed. The mentioned elements pointed out in the literature suggest the management process (planning, execution and control, systems and technology, performance and profile evaluation, such as characteristics and skills of managers), while the characteristics of the managers consist of motivation, stress, decision making, extroversion,

openness to experience, conscientiousness, teams, communication, leadership and negotiation. This construct was carefully built based on the literature exposed in this work.

Based on these notes, Figure 1 is presented, representing the aforementioned construct and the research hypothesis.
The hypothesis of this study is set to explore the interplay between organizational culture and behavior of managers (H₁ as in Figure 1), and is stated as H₁: The elements of organizational culture are significantly related to the characteristics of managers’ behavior. In this sense, the effort of this research is centered on the application of the concepts of organizational culture and individual and interpersonal behavior, as presented in the method section.

**Method**

The population of this study consists of the 500 Brazilian companies present in Exame “Maiores e Melhores” magazine, which is edited annually and discloses the best and largest companies in Brazil, classifying them according to their economic-financial indicators. The final sample for this research consists of 53 companies, with a data collection period in the months of July, August, September and October of 2019. From all the responses recorded in the database, which totaled 93, only those that were complete (no missing elements) were considered for this study.

Participants are managers in the controllership area (leadership positions, such as director, manager, supervisor, coordinator), who contemplate a systemic view of the companies where they operate. During the selection, the position and the functions exercised were investigated, in order to ensure that they were managers responsible for organizational control and monitoring (primary function of the Controller).
Data were collected from a research instrument specially prepared for this study, validated by six experts (PhD holders, faculty members) and six market professionals (Controllers). The pre-test was applied to 15 companies in the sample. After pertinent adjustments (validation), the questionnaires were made available on the SurveyMonkey® platform and sent to the participants, only after making the respective telephone contacts. These respondents were invited to answer a questionnaire using a scale from zero to ten (Hair et al, 2007; Henseler et al, 2009), with an average time to complete of 12 minutes.

Two blocks were designed: Block I - Organizational culture: organization; planning, execution, control; information technology and systems; process for evaluating the performance and characteristics and skills of managers, and Block II - Behavior of the controlling manager: i) individual process - motivation, stress, decision-making, extroversion, openness to experience, and conscientiousness; ii) interpersonal process - team, communication, leadership, negotiation. Each of the blocks has specific questions, which were answered by the managers. All information has been safely stored in computer files and can be requested at any time.

Descriptive analysis, dispersion and means, as well as Pearson correlations were used, adopting the SPSS® software. Pearson’s correlation is seen as a measure of bivariate association of the degree of relationship between two variables (Moore, 2014), aiming to meet, thus, the research objective of investigating the interplay between culture and behavior of managers. Several tests were executed, aiming at analyzing individual and grouped variables, exhausting the possibilities to explain relationships between the elements of culture and the characteristics of the manager. After process and analysis all major correlations are in the tables in Section 4. In addition to the correlations, it was considered pertinent to analyze the distribution and variation of data using a series of Boxplot graphs, in the interest of better visualization. Data analysis and discussion of the results are presented next.

Analysis and discussion of results

General analysis: companies, respondents e variables

The companies followed the criteria of Exame “Maiores e Melhores 2019” magazine, in terms of financial indicators, such as sales, profits, and others, belonging to several geographic regions. A sectoral analysis was also carried out, taking as classification those from commerce, manufacturing and service sectors. Along these lines, the services sector predominated (the largest number of companies), followed by manufacturing and, finally, commerce.

When it comes to the profile of the managers who responded to the survey, it can be seen that a large portion holds positions of Chief Financial Officer (CFO) and Controller (controllership manager),
which indicates alignment with the objective of this research. Figure 2 shows the stratification of the mentioned profile.

Survey respondents were also classified by gender, whose results indicated that 83% of the sample is male and 17% female. The average age among the 53 respondents was 51 years, with the minimum recorded being 32 and the maximum 62. Additionally, the time that the manager has worked in the company (tenure) was targeted by the questionnaire. In this regard, the maximum tenure corresponds to 37 years (position of CFO) and the minimum 2 years (position of Controller). Regarding the variables addressed in the study, it was deemed pertinent to represent the distribution of data by means of a boxplot, evidencing the respective results in Figure 3.
It is observed that the greatest variability occurred with: Evaluation Performance and openness to experience. The most prominent upper medians, which, consequently, indicated the attribution of higher scores on the scale, included control and decision making.

Consciousness appeared differently on the graph, showing symmetries in higher notes, while it also registered a greater number of outliers (6 companies). It is noted that there is a general tendency, in both constructs (culture and behavior), to assign scores above 5 for the tested sample.

**Analysis of the organizational culture construct**

The scores related to the organizational culture construct were calculated and evidenced the results shown in Table 3. It should be noted that planning, execution and control belong to the management process element, while performance evaluation process and characteristics and skills of managers to the human relationship element (Figure 1).
Table 3
Scores organizacional culture

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Average</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>53</td>
<td>3.1667</td>
<td>9.6667</td>
<td>6.987421</td>
<td>1.6062275</td>
</tr>
<tr>
<td>Planning</td>
<td>53</td>
<td>2.0000</td>
<td>10.0000</td>
<td>6.836478</td>
<td>2.0986592</td>
</tr>
<tr>
<td>Execution</td>
<td>53</td>
<td>1.75</td>
<td>9.50</td>
<td>6.5425</td>
<td>2.04853</td>
</tr>
<tr>
<td>Control</td>
<td>53</td>
<td>2</td>
<td>10</td>
<td>7.642</td>
<td>2.1131</td>
</tr>
<tr>
<td>Information technology and systems</td>
<td>53</td>
<td>3.25</td>
<td>10.00</td>
<td>7.0566</td>
<td>1.86158</td>
</tr>
<tr>
<td>Performance evaluation process</td>
<td>53</td>
<td>1.0000</td>
<td>10.0000</td>
<td>6.233962</td>
<td>2.0646236</td>
</tr>
<tr>
<td>Characteristics and skills of managers</td>
<td>53</td>
<td>2.25</td>
<td>10.00</td>
<td>6.8962</td>
<td>1.99243</td>
</tr>
</tbody>
</table>

Source: elaborated by the authors.

The results indicated that the highest mean in the sample refers to control (7.6), followed immediately by technology and information systems (7.05), which means that companies are more committed by managers to monitor the results achieved, the managers justify to their superiors the deviations observed between the plans and respective achievements and participate in specific meetings to evaluate the results. In addition, 70% of the answers show that companies use integrated management systems and simulation systems, have flexibility in their reports, and use corporate software to prepare the budget.

The results related to control seem to follow a previous study by Reginato (2010), which identified percentages between 60% and 80% for similar questions. On the other hand, when it comes to technology and information systems, findings of the present research show greater adoption of technology and systems by companies in comparison to Reginato (2010), which showed that between 23% to 59% of companies adopted integrated and simulation systems making reporting more flexible to their users. With due limitations and differences between sample and period of both surveys, there seems to be an evolution in terms of technology and systems in large Brazilian companies.

The standard deviation of the variable control was the largest (furthest from the average), whereas the smallest deviation corresponds to the organization.

Following the analysis, there is the organization (6.98), the characteristics and skills of the managers (6.89), the planning (6.83), the execution (6.54) and the performance evaluation process (6.23), respectively. These numbers reflect that a reasonable part (above 60%) of the sample revealed an organizational culture permeated by a model composed of formal organization, established management
process, adoption of information and performance evaluation systems, and appreciation of its human resources, as touted by classics like Fayol (1989), Stoner and Freeman (1985), Daft (2004), Robbins (2006). The results are aligned with the study taken as the basis for the present research (Reginato & Guerreiro, 2011).

It noteworthy that in this relevant sample of the largest Brazilian companies, there are those without a formalized and fully defined model, and others that are in the process of implementation or change, which is reflected in the percentage of responses with scores between 1 and 5, for example.

**Analysis of the construct behavior of the controllership manager**

The scores related to the construct behavior of the controllership manager were calculated and results presented in Table 4.

<table>
<thead>
<tr>
<th>Construct</th>
<th>N</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Average</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>53</td>
<td>3.75</td>
<td>9.75</td>
<td>7.2406</td>
<td>1.4065</td>
</tr>
<tr>
<td>Stress</td>
<td>53</td>
<td>3.6667</td>
<td>8.3333</td>
<td>6.213836</td>
<td>1.0842587</td>
</tr>
<tr>
<td>Decision making</td>
<td>53</td>
<td>7.0</td>
<td>10.0</td>
<td>8.481</td>
<td>0.8318</td>
</tr>
<tr>
<td>Extroversion</td>
<td>53</td>
<td>5.3333</td>
<td>9.3333</td>
<td>7.408805</td>
<td>0.8954813</td>
</tr>
<tr>
<td>Openness to experiences</td>
<td>53</td>
<td>1.5</td>
<td>10.0</td>
<td>7.255</td>
<td>1.7911</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>53</td>
<td>5.0</td>
<td>10.0</td>
<td>8.40</td>
<td>1.378</td>
</tr>
<tr>
<td>Team</td>
<td>53</td>
<td>5.5</td>
<td>10.0</td>
<td>8.321</td>
<td>1.2789</td>
</tr>
<tr>
<td>Communication</td>
<td>53</td>
<td>4.0000</td>
<td>9.3333</td>
<td>7.213836</td>
<td>1.3043228</td>
</tr>
<tr>
<td>Leadership</td>
<td>53</td>
<td>5.00</td>
<td>9.25</td>
<td>7.6274</td>
<td>1.16811</td>
</tr>
<tr>
<td>Negotiation</td>
<td>53</td>
<td>2.0</td>
<td>10.0</td>
<td>7.075</td>
<td>1.8486</td>
</tr>
</tbody>
</table>

Source: elaborated by the authors.

Assessing the scores, it is clear that the highest averages are linked to decision making, conscientiousness and team. These numbers indicate that the managers of the surveyed companies are mostly prepared before making decisions, gathering information for a complete analysis, analyzing the impact of decisions in the global context of the company, dialoguing with their peers and creating future scenarios. In addition, the characteristics related to responsibility, participation and recognition of peers and teams are highlighted. The team item, which registered an average of 8.32, concerns people acting collectively and the responsible manager recognizing the individual and collective merits of each of its members. This finding may indicate a participatory style.
Otherwise, if this result is compared, mainly, with the characteristics and skills of managers and the performance evaluation process of the organizational culture construct, it can be inferred that in the view of the responding manager, he considers that he has a participatory and more accentuated recognition in relation to his team than the company has as a whole.

The lowest average (6.2) was in charge of stress, which shows that the manager may not have enough resources available to meet the demands of his work, there is a certain turnover of people in the team and in the company there is no full feeling of recognition and full appreciation of the health and quality of life of employees.

When the extremes are evaluated, the characteristics open to experience and negotiation receive the minimums (1.5 and 2.0), followed by motivation (3.75). On the other hand, the maximums are between 8.3 and 10, for all.

**Correlations: Organizational culture and behavior of the controllership manager**

After analyzing all the elements and characteristics of the constructs and their correlations, significant results are highlighted in this section. In sequence, Table 5 presents the significant correlations (* for the 0.05 or .** for the 0.01 alpha level), for the purpose of analyzing the relationships between the elements of organizational culture and the characteristics of the manager’s behavior.

<table>
<thead>
<tr>
<th>Table 5 Correlations</th>
<th>Behavior</th>
<th>Culture</th>
<th>Motivation</th>
<th>Stress</th>
<th>Decision Making</th>
<th>Extroversion</th>
<th>Openness to Experience</th>
<th>Consciousness</th>
<th>Team</th>
<th>Communication</th>
<th>Leadership</th>
<th>Negotiation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Organization</td>
<td>.256</td>
<td>.485**</td>
<td>-.75</td>
<td>.129</td>
<td>.065</td>
<td>.456**</td>
<td>.266</td>
<td>.277**</td>
<td>-.123</td>
<td>.439</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Planning</td>
<td>.366**</td>
<td>.419</td>
<td>.125</td>
<td>.300*</td>
<td>-.56</td>
<td>.369**</td>
<td>.163</td>
<td>.377**</td>
<td>.109</td>
<td>.198</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Execution</td>
<td>.538**</td>
<td>.521**</td>
<td>.108</td>
<td>.279*</td>
<td>-.31</td>
<td>.466**</td>
<td>.250</td>
<td>.433**</td>
<td>.152</td>
<td>.190</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control</td>
<td>.617**</td>
<td>.571**</td>
<td>.122</td>
<td>.292*</td>
<td>-.91</td>
<td>.476**</td>
<td>.184</td>
<td>.557**</td>
<td>.134</td>
<td>.109</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technology</td>
<td>.232</td>
<td>.518**</td>
<td>.240</td>
<td>.364**</td>
<td>-.244</td>
<td>.525**</td>
<td>.282*</td>
<td>.068</td>
<td>.139</td>
<td>.185</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Systems</td>
<td>.378**</td>
<td>.455**</td>
<td>.165</td>
<td>.318*</td>
<td>.116</td>
<td>.429**</td>
<td>.272*</td>
<td>.494**</td>
<td>.057</td>
<td>.201</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluation</td>
<td>.260</td>
<td>.630**</td>
<td>.139</td>
<td>.326*</td>
<td>.149</td>
<td>.681**</td>
<td>.310*</td>
<td>.151</td>
<td>.127</td>
<td>.395**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: elaborated by the authors.
The organization element shows a positive and significant correlation with the characteristics of stress, consciousness and negotiation. The result linked to conscientiousness and negotiation indicates that the clear definition of the managers’ functions, delegation of authority without depending on the approval of hierarchical superiors, compatibility between functions and responsibilities, the predominantly formal power, the formalization of an organization chart and updating of rules and procedures are all importantly related to the manager’s ease in organizing his work and the delivery of reports, as well as his active participation to achieve the best negotiation for the company.

Negotiation, particularly, associated with the organization element also means that the company has a defined policy in relation to the career and appreciation of its managers. From another point of view, the significant relationship between the organization element and the manager’s stress may point to what Vasconcelos (1992) said about adaptation and exhaustion phases. The more attributions, responsibilities and functions the company assigns to the manager, the more he may feel stressed over time.

The elements of planning, execution and control showed a significant correlation with the characteristics of motivation, stress, conscientiousness and communication of the manager. This finding makes sense as the manager feels more motivated when the company involves him in the planning stages, discloses the strategies and acts in a participatory manner.

With regard to execution, it supports actions based on the budget, provides full autonomy for decision making, consults managers for decisions that affect the company as a whole, while the results are used as parameters for managerial evaluation. As for control, managers are committed to monitoring and participating in the process of evaluating the obtained results. This culture, based on a formal management process, instigates the motivation and communication of the manager, as well as facilitates the performance of the manager as a whole. As the manager participates in the discussion meetings at all stages of the management process, communication becomes a relevant feature for the manager and the company.

This result proved to be interesting, as the company that presents formalized and well-designed planning, execution and control, with all the inherent attributes (analyzed through the research questions) demands adequate communication from its managers and their teams in general. In this way, communication becomes essential for effective control, since the controllership manager constantly needs to inform and be informed.

The same elements of planning, execution and control appear to be correlated with the stress and motivation factor. This result is justified, as the manager feels motivated working in a company with elements properly established in relation to his participation in the group and performance, and having the quality of life and permanence in the company valued. The opposite also occurs when the company does not positively meet the demands related to the manager as an individual, the stress factor can increase.
This result is consistent with the literature, which emphasizes that stress contributes to inefficiency, high turnover, the need for health care (Jex, 2014; Sadir & Lipp, 2009).

In addition to the aforementioned elements, the characteristics and skills of the managers -element of the company is also correlated with stress -characteristic of the manager, registering the largest number (.630). At this specific point, if the company has a culture that permeates incentives for personal and professional development, valuing the ideas of managers and stimulating interpersonal relationships and a pleasant environment, such orientation significantly impacts stress. Highlighting the stress, it was the only characteristic of the manager who related to all elements of culture.

The elements technology and information systems and the characteristics and skills of managers showed positive and significant correlations with conscientiousness. The first correlation reflects that companies that adopt integrated information systems, reports tailored to the user and other technological tools can provide an environment in which managers become more organized and responsible, aware of their tasks. As for the characteristics and skills of managers, the company, by making it easier or providing training through courses, in addition to providing a pleasant environment, can contribute to making the manager aware of his responsibilities and hardly delaying reports or other activities.

Technology and information systems also appeared significantly linked with extroversion. The results indicate that the company that uses an integrated management system, flexibility that allows managers to adapt reports according to the specific needs of users and corporate budget software, is associated with a proactive and cooperative manager who dialogues with peers, teams and superiors.

The performance evaluation processes appear positively and significantly correlated with motivation, stress, conscientiousness and communication. It seems justifiable that a formal evaluation process, in which the company evaluates, rewards, punishes and disseminates the results to the managers, fosters motivation, stress, and manager’s conscience. It is noteworthy that, as referenced by Amabile & Kramer (2007), the impacts noted on people’s perceptions, emotions and motivation occur when there is interaction among people, discussions between teams, meetings, valuing ideas, involvement in projects, reaching goals and rewards, as well as any form of incentive, and that will have an impact on the company’s overall performance. Depending on the case, the charge, the punishment, can also generate stress.

Thus, based on the results of this research, the formulated hypothesis can be supported, given that elements of the organizational culture had a significant relationship with the characteristics of the manager’s behavior, specifically with that of the controllership area. In general, the study found that there is a relationship between culture and behavior of the managers of the companies in this sample. From the analysis and discussion of the results, final considerations were developed and are registered next.
Conclusions

Considering the results of this research, an important relationship was found between elements of the organizational culture and those linked to the behavior of the leaders of the controllership area of the companies in this sample. In the meantime, positive correlations were found between the motivation characteristic and the elements of execution and control; the stress characteristic and the elements of execution, control, technology and information systems and characteristics and skills of managers; the conscientiousness characteristic and the elements of technology and information systems; the communication characteristic and the control element. It is noteworthy that stress was the characteristic that appeared with the highest number of correlations (four elements), and communication was correlated only with control.

In general, all the elements and characteristics showing significant correlations have an adequate justification for this, as detailed in the results section. It was also possible to validate the theoretical construct based on the reviewed literature.

On the one hand, evaluating the company’s culture and its elements can explain the behavior of its leaders, contributing to measures being taken to improve the process. On the other hand, knowing more about the behavior of the leader of the area responsible for corporate control and monitoring, can contribute to the company by addressing stimulating professional development and valuing the importance of such manager for the performance of areas and the whole company. In this sense, results shown can boost the companies to reflect on the two variables: culture and behavior of the controllership leader, opening space to strengthen organizational control.

For society, this research contributes by highlighting organizational models and profiles that can be explored in explaining performance and contributory social actions being implemented or stimulated in companies. In addition, it should be noted that this research is under development, so it will keep receiving improvements and enrichment in terms of its sample and will bring new contributions to the academy. One of the main contributions, in this sense, is the development of management models that encourage the best behavior of the manager in the company and cultivate a culture that promotes better performance.

It is worth noting that results from this research cannot be generalized, as they have limitations related to the application of the questionnaire and the perceptions of its respondents, as well as the method of data analysis, as it is common to all surveys of this nature.

It is suggested, for future research, a deep understanding of the tested relationships and a careful look at the internal environment of the companies, focusing on the behavior of the controllership and its responsibilities. In this line, other forms of conducting future studies aligned with this can be planned, by
diversifying the sample, segments, size of the companies, or corporate types. It is noteworthy that in this line, this research is in progress with the support of the country’s development agency.

References


