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ARTICLE

Managerial competencies in the supermarket retail segment in Brazil before and during the COVID-19 pandemic

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Abstract

In times of major crises, such as those brought about by the COVID-19 pandemic, organizations must adapt how they operate. In this context, the importance attributed to each managerial competence can be changed to guarantee the organization's survival. Thus, considering managerial competencies as a set of characteristics and traits that favor superior performance (Boyatzys, 1982) and the ability to mobilize and combine personal and environmental resources in a specific situation (Le Boterf, 1999), this article analyzes changes in the relevance attributed to managerial skills in the supermarket retail segment in Brazil before and during the COVID-19 pandemic. This is a quantitative study with data collected through a questionnaire applied to managers. Data were analyzed using non-parametric statistics, exploratory factor analysis, and paired Wilcoxon signed rank test. The results show that changed competencies included: memory, use of socialized power, use of unilateral power, and knowing how to combine resources and mobilize them in each context. This study provides information to guide managers and organizations in developing and using managerial skills in times of change.

Keywords: Managerial skills. Supermarket retail. COVID-19.

Competências gerenciais no segmento varejista de supermercados no Brasil antes e durante a pandemia de COVID-19

Resumo

Em tempos de grandes crises, como as trazidas pela pandemia da COVID-19, as organizações precisam adaptar as formas como operam. Nesse contexto, a importância atribuída a cada competência gerencial pode ser alterada para garantir a sobrevivência da organização. Assim, considerando competências gerenciais como um conjunto de características e traços cuja posse favorece o desempenho superior (Boyatzys, 1982) e o saber mobilizar e combinar os recursos pessoais e ambientais numa situação específica (Le Boterf, 1999), este artigo objetiva analisar alterações na importância atribuída às competências gerenciais no segmento varejista de supermercados no Brasil antes e durante a pandemia de COVID-19. Trata-se de um estudo quantitativo cujos dados foram coletados por meio de questionário aplicado aos gestores e analisados por estatística não paramétrica, análise fatorial exploratória e teste de postos e sinais de Wilcoxon pareado. Os resultados mostraram que as competências que tiveram sua importância alterada foram memória, uso do poder socializado, uso do poder unilateral, saber combinar recursos e mobilizá-los em determinado contexto. Este estudo gera informações que podem orientar gestores e organizações sobre o desenvolvimento e o uso das competências gerenciais em tempos de mudanças.

Palavras-chave: Competências gerenciais. Varejo supermercadista. COVID-19.

Competencias gerenciales en el segmento minorista de supermercados en Brasil antes y durante la pandemia de COVID-19

Resumen

En tiempos de crisis importantes, como las provocadas por la pandemia de COVID-19, las organizaciones deben adaptar la forma en que operan. En este contexto, se puede cambiar la importancia atribuida a cada competencia gerencial para garantizar la supervivencia de la organización. Así, considerando las competencias gerenciales como un conjunto de características y rasgos cuya posesión favorece un desempeño superior (Boyatzys, 1982) y el saber movilizar y combinar recursos personales y ambientales en una situación específica (Le Boterf, 1999), este artículo pretende analizar los cambios en la relevancia atribuida a las habilidades de gestión en el segmento minorista de supermercados en Brasil, antes y durante la pandemia de COVID-19. Este es un estudio cuantitativo cuyos datos se recogieron a través de un cuestionario aplicado a los gerentes y se analizaron mediante estadísticas no paramétricas, análisis factorial exploratorio y prueba de rangos con signo de Wilcoxon para muestras pareadas. Los resultados muestran que las habilidades que han visto alterada su importancia son: memoria, uso del poder socializado, uso del poder unilateral, y saber combinar recursos y movilizarlos en un contexto determinado. Este estudio proporciona información que puede orientar a gestores y organizaciones en el desarrollo y uso de competencias gerenciales en tiempos de cambio.

Palabras clave: Competencias gerenciales. Segmento minorista de supermercados. COVID-19.

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INTRODUCTION

The COVID-19 pandemic, which began at the end of 2019, has brought worldwide consequences that were previously unimaginable. These include companies' closure, social isolation, and a large number of infected and dead people. Despite the shutdown of most businesses, the supermarket retail sector was one of the few authorized by the government to continue operating. However, it was forced to make significant changes in its structures to meet health requirements, a sudden demand increase, product shortage, problems in the supply chain, introduction of new technologies, hiring of new professionals, and absence of workers contaminated by the disease (Abras, 2020). It is among the most relevant segments of the Brazilian economy - in 2021, it accounted for 7.03% of the gross domestic product (GDP) -, one of the largest job creators in Brazil, and one of the few to hire workforce during the pandemic (Abras, 2023).

In this scenario of significant and sudden changes in the supermarket segment, managers were forced to adapt and shape their organizations in order to continue operating and achieving positive results. For this reason, they were expected to have or develop the appropriate managerial skills for the new context, knowing how to mobilize and combine personal and environmental resources in a specific situation (Le Boterf, 1999).

Managers must adapt to the challenges imposed by the organizational environment (Boyatzis, 1982; Le Boterf, 2003; Freitas & Odelius, 2017; Godoy & Mendonça, 2020). However, the pandemic proved to be much more daunting, since changes were diverse and fast, strongly affecting companies' operation (Mattedi, 2020) and reducing the time available for developing new managerial skills. Therefore, managers needed a stock of potential managerial competencies (Freitas & Odelius, 2018), the ability to perceive which of them would be most relevant in the specific context of the pandemic, and, from there, put them into use.

Hence, in a context of significant changes, such as COVID-19, managers were required to use managerial skills different from those employed in less challenging situations. This article analyzes the changes in the relevance assigned to managerial competencies in the supermarket retail segment in Brazil, before and during the pandemic.

Previous studies have focused mainly on aspects such as literature reviews (Freitas & Odelius, 2018), mapping and assessing managerial competencies (Brandão et al., 2010; Rothdiener, 2020; Freitas & Odelius, 2022), as well as relationships between managerial skills and performance (Hillman, 2020; Caldas et al., 2020). However, we did not find any studies that evaluated changes in the importance attributed to managerial competencies in contexts of crises like the pandemic, a gap that this article seeks to fill. To achieve the proposed goal, it includes this introduction, followed by a brief description of the supermarket retail segment and the concepts of managerial competencies. Next, we present the methodological procedures, results, and final remarks.

THE STUDY CONTEXT: THE SUPERMARKET SEGMENT

The supermarket segment represents the set of establishments that sell directly to consumers, mostly through physical stores. Until 2020, this sector showed a growing trend regarding revenue, profitability, and size, which has continued during the pandemic (Table 1). In 2021, there were approximately 3.1 million people in direct and indirect jobs, a figure that increased to 3.2 million in 2022 (Abras, 2021).

Table 1
Data from the supermarket segment in Brazil

Year	Revenue (in R$ billion)	Profitability	Number of stores
2019	378.30	2.4%	89.60 thousand
2020	409.60	2.7%	91.00 thousand
2021	611.20	2.9%	92.58 thousand
2022	695.70	2.9%	94.71 thousand

Source: Based on Abras (2023).

The segment has a complex network of suppliers, including both large companies and family farmers. It also uses a complex logistical structure that brings products from abroad and from small farmers, which use their own means of transportation. Many activities are repetitive, such as organizing stock, loading and unloading goods, and cashier service, which involve long working hours and low pay. As a result, employee turnover is high, and workers are mostly young, single, with low education level, low social *status*, and no career perspective (Valoria et al., 2022).

During the pandemic, supermarkets were allowed to operate, but they had to change in several areas: structure, processes, people, suppliers, customers, governments, technology, etc. Immediately, they had to adjust to government health requirements, which involved availability of alcohol gel, sticky tapes placed on the floor to organize social distancing, sanitizing baskets and trolleys, separating cashiers with acrylic plates, the use of masks and gloves by employees, the use of thermometers to measure customers' body temperature when entering the stores, and reducing the number of people inside. Some shops had special opening hours for the elderly and pregnant women (Abras, 2020).

On the other hand, with bars and restaurants closed, some consumers turned to supermarkets to buy food and prepare meals at home. This led to an increase in revenue (Table 1), which was followed by several difficulties, like simultaneous increase in demand and shortage of essential products, problems in supply and production, lack of national and international transportation, as well as delays in delivery, worsened by the unpreparedness of industries to meet the new and large demands of consumption channeled to supermarkets. All these factors had a direct impact on supermarket management (Ivanov & Dolgui, 2020).

There was also an increase in the use of new technological resources, in digitalization and automation, with more self-service, incentives to pay by credit and debit card swipe, and growing app-based service and delivery (Agner et al., 2022). In addition, part of the consumers shifted to online shopping (Abras, 2021), which forced an articulation with other players, like delivery boys and online sales platforms (Pantano et al., 2020).

Finally, the number of people infected and killed by COVID-19, as well as the tension resulting from the changes in the way of working, created fear among workers, undermining their mental and emotional health. This has increased the number of absences from work and affected the continuity of activities (Valoria et al., 2022). Therefore, due to all these challenges, which forced managers to act in a totally different context, this segment has become a relevant *locus* for studying changes in the relevance attributed to managerial competencies, before and during the pandemic.

MANAGERIAL COMPETENCIES

Managerial competencies have gained relevance by assuming that the more competence a manager has, the better his/her performance will be (Cockerill, 1994; Levenson et al., 2006; Brandão et al., 2010). This assumption is strengthened by Phillips et al. (2020, p. 14), who, based on Clifton and Harter (2019), stated that an organization's productivity depends largely on the quality of its managers.

The concept of managerial competence was originally introduced by Boyatzis (1982), and comprises a set of observable behaviors that lead organizations to achieve higher performance. This idea was adopted by Cockerill (1994) and Brandão et al. (2010), when they describe the behaviors expected from individuals who hold leadership positions in organizations. For Freitas and Odelius (2018, p. 39), these actions are

> observed or potential behaviors, through which managers, as individuals, can show both knowledge, skills, attitudes, or synergy between them, and personal attributes, creating value and better results for themselves, for other individuals, and for teams, departments, organizations or networks, in a way compatible with the context, the available resources, and the adopted strategy.

In these authors' definition, understanding potential behavior includes resources that can be useful in unplanned situations. This idea also appears in Hellriegel et al. (2004), who consider them as knowledge, skills, behaviors, and attitudes that a person should have in order to be effective in a wide range of managerial positions and in different types of organizations. In this regard, these abilities go beyond the behaviors observed at the moment, adding those that potentially exist in individuals and allow them to act in several contexts (Pillay, 2008).

Studies on managerial competencies show a variety of approaches (Freitas & Odelius, 2018). However, in this article we chose Boyatzis' (1982) and Le Boterf's (2003) perspectives, because, in their set of competencies, there are some related to situations of change that stand out, like adaptability and knowing how to choose in an emergency.

Boyatzis (1982) listed 21 competencies linked to characteristics, traits, and demands that guide the development of an ideal manager profile (Brito, Paiva, & Leone, 2012), summarized in Box 1.

Box 1
Managerial competencies according to Boyatzis (1982)

Competence	Characteristics
Efficient orientation	Value planning, organization, and use of resources to achieve efficient results.
Proactivity	Capable of putting planned actions into practice and solving problems.
Diagnostic use of concepts	Uses concepts to interpret events and identify patterns in the available information.
Concern about impacts	Has an assertive behavior and is concerned about the way symbols of power, reputation, and status affect other people.
Self-confidence	Shows self-determination and security in the decision process.
Use of oral presentations	Capable of using verbal and non-verbal resources efficiently.
Logical thinking	Organizes thoughts and activities in a logical sequence, understanding their causes and likely effects.
Conceptualization	Creates concepts, insights, or solution to a problem.
Use of socialized power	Capable of influencing other individuals, seeking coalitions and commitment to execute new tasks.
Positive thinking (optimism)	Uses verbal and non-verbal skills to make people feel valued, by showing confidence in them.
Group management	Fosters collaboration and group work effectively.
Self-evaluation and critical sense	Is conscious of his/her limitations, abilities, and performance.
Development of other people	Trains and provides feedback to employees, helping them to do their work.
Use of unilateral power	Encourages subordinates, while seeking their commitment and compliance.
Spontaneity	Expresses emotions realistically.
Self-control	Assesses costs and benefits of an action, and is capable of suppressing his/her needs for the benefit of the organization.
Perceptual objectivity	Assesses the available alternatives objectively, taking the most effective decision.
Resistance and adaptability	Is flexible and adaptable to changes, acting under stress in search of results.
Concern about close relationships	Values personal and family aspects of subordinates, building and appreciating personal relations at work.
Specialized knowledge	Knows theories, methods, and systems of the task to be performed.
Memory	Brings to the decision process facts and events that help the decision.

Source: based on Boyatzis (1982).

The author highlights that using these competencies favors a manager's superior performance.

For Le Boterf (1999), competence is seen in the application of resources in real work situations, defined as "knowing how to mobilize and combine personal resources and those of the environment in a proper way, in a specific situation" (p. 109). He states that competence should be applied to a set of individual and professional characteristics, as well as to the individual's own

involvement with the environment where he/she is, since professionals are not competent on their own; they are competent for their network of contacts, their databases, their tools available for the job, their team, their networks of resources and equipment, their institutional support, and their customers. Box 2 shows the actions that, according to Le Boterf (2003), are necessary for a professional to be able to manage complex and constantly changing situations.

Box 2
Competencies in complex situations, according to Le Boterf

Competence	Attributes
Knowing how to act and react appropriately	• Knowing what to do.
	• Going beyond what is prescribed.
	• Knowing how to decide in an emergency.
	• Arbitrating, judging, negotiating, and deciding.
	• Chaining actions towards a goal.
Knowing how to combine resources and use them in a context	• Knowing how to build competencies based on resources.
	• Knowing how to take advantage of both his/her own resources of knowledge, skills, and qualities and the resources of hir/her environment.
Knowing how to transpose	• Memorizing multiple situations and standard solutions.
	• Knowing how to take distance, acting in both directions.
	• Using his/her knowledge for modeling.
	• Determining and interpreting context indicators.
	• Knowing how to create the conditions for transposing, with the assistance of transferable schemes.
Knowing how to learn and learning how to learn	• Knowing how to learn, drawing lessons from experience.
	• Knowing how to change action into experience.
	• Knowing how to describe learning.
	• Acting in a double-learning loop.
Knowing how to get involved	• Knowing how to use subjectivity.
	• Taking risks.
	• Knowing how to undertake.
	• Acting with professional ethics.

Source: based on Le Boterf (2003).

Change and its effects on organizations have been highlighted in definitions of competencies. Since managers are responsible for organizational performance, in times of change they must be able to notice both the internal signs and those in the external environment, and react appropriately, in order to ensure the organization's survival with positive results. This involves the ability to articulate resources and people in times of turbulence. This aspect was already present in Katz's (1974, p. 96) classification, when he highlighted conceptual competence as the manager's ability to see the company as a whole, in addition to its relationships with industry, the community, and political, social, and economic forces.

This aspect is also present in Hellriegel et al. (2004), Pillay (2008), and Freitas and Odelius (2018), who show the context influencing the use of competencies. This understanding is also present in Boyatzis' (1982) classification, when mentioning the manager's adaptability, and in Le Boterf (2003), by stating "knowing how to act and react appropriately" and "knowing how to combine resources and mobilize them in a specific context". Hence, understanding managerial competencies assumes that each context requires a set of suitable actions (Paz & Odelius, 2021). Quinn (1988) highlights the value of "coping with change", "creative thinking", and "change management", which display the need to act according to changes in the organization's environment. Freitas and Odelius (2022, p. 228) show that managerial competencies associated with change management

are present in many studies, indicating the manager's ability to "conduct organizational changes with balance, mobilizing people before, during, and after the process".

However, it is possible that the idea of adaptation means more the ability to assign importance to competencies that are not used in stable contexts than the development of new ones, due to the difficulties of changing the behavior of managers and subordinates (Boyatzis, 2008; Taylor, Passarelli, & Oosten, 2019; Mattedi, 2020; Jack et al., 2023), as well as time limitation and other inertial constraints (Hannan & Freeman, 2005). Therefore, managers must show a diversity of skills and be able to choose those that are a priority in times of crisis (Godoy & Mendonça, 2020). Hence, in times of COVID-19, it is relevant to investigate changes in the importance attributed to the skills used by managers, in order to inspire and keep employees motivated (Hansen et al., 2020; Jensen et al., 2020), promote changes in their behavior, and achieve positive results.

METHODOLOGICAL PROCEDURES

This study used exploratory quantitative research. Data were collected through a questionnaire with three parts. The first included elements that make up the free and informed consent form, like the study context, guarantee of secrecy, the researcher's name and contact details, as well as agreement to participate.

The second part assessed the importance assigned to managerial competencies, before and during the pandemic, using a 5-point Likert scale ranging from "not important" to "very important". The statements that made up the questionnaire were taken from Boyatzis' list of 21 skills (1982), and five from Le Boterf (2003). This part of the questionnaire comprised two blocks. In the first, respondents should think about the importance of each action in the context before the pandemic. In the second block, they had to analyze the relevance of each competence during the pandemic, and statements were exactly the same.

Finally, in the third part, we collected demographic data on age, gender, education, training area, experience in a management position, management area, and region of residence. This was done electronically, using the Google Docs platform.

We reached the audience by email and WhatsApp, survey of profiles, groups, and online communities on social networks, such as LinkedIn, Instagram, and Facebook. We also received indications of contacts, and we publicized the survey in associations and bodies that represented the segment, such as trade associations, chambers of shop owners, and regional and national associations: Bahia Association of Supermarkets (Abase), Minas Gerais Association of Supermarkets (Amis), São Paulo Association of Supermarkets (Apas), and Brazilian Association of Supermarkets (Abras). Data were collected between February and March 2021, a significant period, since the pandemic was at its peak, allowing participants to answer while the phenomenon was taking place.

The study was carried out with 67 managers of companies in the supermarket retail segment, and the sample was non-probabilistic (Favero & Belfiore, 2017), as it comprised individuals who were willing to answer the questionnaire. Before it was actually applied, we conducted two pre-tests for semantic validation and assessment of the instrument's clarity. The first test was applied to 10 managers, and the second to 20, which was the final sample, and there was no need to change the questionnaire. Table 2 shows the respondents' high level of education - 70.2% had at least a higher education degree.

Table 2
Respondents' profile

Gender	Female: 44.8%	Male: 52.2%	Not informed: 3%	
Education	High school: 14.9%	Ongoing undergraduate course: 9%	Completed undergraduate course: 20.9%	*Lato sensu* graduate programs: 49.3%
	Stricto sensu graduate programs: 6%			
Age	Up to 24 y/o: 10.4%	From 25 to 30 y/o: 13.4%	From 31 to 35 y/o: 19.4%	From 36 to 40 y/o: 17.9%
	From 41 to 45 y/o: 13.4%	From 46 to 50 y/o: 11.9%	Above 50 y/o: 13.4%	
Training area	Applied Social sciences: 37.3%	Exact sciences: 32.8%	Human sciences: 25.4 %	Biological sciences: 4.5%
Experience in a management position	Less than 1 year: 13.4%	Less than 2 years: 16.4%	Less than 4 years: 16.4%	Less than 6 years: 14.9%
	Over 6 years: 38.8%			
Region of residence	Center-West: 19.4%	Northeast: 22.4%	Southeast: 55.2%	South: 3%
Management area	Operations: 22.4%	Finance: 13.4%	Commercial: 14.9%	Purchasing: 13.4%
	Logistics: 4,5%	Human Resources: 6%	Other: 25.4%	

Source: Elaborated by the authors.

Data were analyzed as follows. We carried out a double exploratory factor study with all 26 items of the scale: one for the answers considering the importance attributed to competencies before the pandemic, and the other during the pandemic. For both, we extracted main components and Varimax rotation, a technique that seeks to find factor formation that enables the best analysis, by reducing the number of items to be assessed. In the two studies, we used the Kaiser-Meyer-Olkin (KMO) test, whose values should be above 0.70; Cronbach's alpha, to check the reliability of factor loadings, where values above 0.70 are appropriate (Field, 2013); and communality, which represents the variability of each variable and whose value should be higher than 0.50 (Hair et al., 1998).

After setting the factors, we used the paired Wilcoxon signed-rank test to measure the difference in positions between two dependent samples (Siegel, 2006). This method was chosen because the sample did not have a normal data distribution. As it has 67 respondents and is relatively large (>25), we adopted the procedures described by Favero and Belfiore (2017), so that the sample was considered suitable for the analysis procedures (Contador & Senne, 2016). We assumed a 5% significance level, which indicates that values up to this level show a significant difference in the relevance attributed to managerial competencies, before and during the pandemic. In addition, we analyzed Abras's publications to collect information on the segment, especially during the pandemic. Excerpts from this information are highlighted throughout data analysis.

RESULTS AND ANALYSES

To achieve the study's goal of evaluating changes in the importance assigned to managerial competencies, before and during the pandemic, it was necessary to identify those that were significant to the respondents at both times. To do that, we carried out an exploratory factor analysis with all the items on the scale, after checking that the sample was appropriate for this type of procedure. This item is structured in the following order: checking the suitability of the sample data for exploratory factor analysis (Table 3); exploratory factor analysis of the data, before and during the pandemic (Tables 4 and 5); and evaluation of changes in the importance attributed to managerial competencies, before and during the pandemic (Tables 6, 7, 8, and 9). After that, we present an item on the discussion of results.

Suitability of samples for exploratory factor analysis

In the first round of sample suitability checking, the items "productivity", "logical thinking", and "concern about impacts" were excluded, due to their low communality (below 0.50). For the same reason, the items "optimism" and "concern for close relationships" were excluded in a second round. The items "knowing how to act and react appropriately" and "spontaneity" did not group together in any factor, either before or during the pandemic. The results of the test are shown in Table 3, with KMO of 0.789 and 0.827, before and during the pandemic. The variance explained for these items was 76.6% before, and 75.47% during the pandemic.

Table 3
Prerequisite for exploratory factor analysis: competencies before and during the pandemic

Items	Communalities before the pandemic	Communalities during the pandemic
Knowing how to combine resources and use them in a context	0.702	0.764
Knowing how to learn and learning how to learn	0.779	0.790
Knowing how to get involved	0.837	0.810
Diagnosis and use of concepts	0.727	0.716
Conceptualization	0.846	0.865
Use of unilateral power	0.809	0.623
Use of socialized power	0.754	0.779
Self-confidence	0.753	0.585
Group management	0.762	0.735
Self-evaluation and critical sense	0.787	0.802
Perceptual objectivity	0.722	0.725
Memory	0.736	0.758
Specialized knowledge	0.745	0.859

Source: Elaborated by the authors.

Factor analysis: factor formation before the pandemic

At this stage, four factors were formed, with an eigenvalue equal or higher than 1 (Table 4). Cronbach's alpha was higher than 0.7 for all factors.

Table 4
Factor loadings: competencies before the pandemic

Indicators	Factor 1	Factor 2	Factor 3	Factor 4	Cronbach´s alpha	Total variance explained by factor
Conceptualization	0.886				0.786	45.40%
Diagnosis and use of concepts	0.729					
Use of socialized power	0.704					
Use of unilateral power	0.598					
Knowing how to learn and learning how to learn		0.846				
Knowing how to get involved					0.830	12.38%
Knowing how to combine resources and use them in a context		0.842				
		0.755				
Self-evaluation and critical sense			0.778			
Group management			0.773		0.865	11.01%
Self-confidence			0.697			
Memory				0.779		
Specialized knowledge				0.764	0.802	7.82%
Perceptual objectivity				0.735		

Source: Elaborated by the authors.

Factor analysis: factor formation during the pandemic

For data during the pandemic, four factors were formed, with Cronbach's alpha higher than 0.7 in all of them. The total variance explained for the four factors was 75.47% (Table 5).

Table 5
Factor loadings: competencies during the pandemic

Indicators	Factor 1	Factor 2	Factor 3	Factor 4	Cronbach's alpha	Total variance explained by factor
Conceptualization	0.909				0.824	42.23%
Diagnosis and use of concepts	0.810					
Use of socialized power	0.795					
Use of unilateral power	0.688					
Knowing how to learn and learning how to learn		0.862			0.854	16.07%
Knowing how to get involved		0.836				
Knowing how to combine resources and use them in a context		0.676				
Self-evaluation and critical sense			0.831		0.763	9.32%
Group management			0.735			
Self-confidence			0.682			
Memory				0.817	0.834	7.85%
Specialized knowledge				0.814		
Perceptual objectivity				0.553		

Source: Elaborated by the authors.

Factors' interpretation in factor analysis

The interpretation of the theoretical meaning of the four factors was based on Boyatzis' framework of managerial competencies (1982, 2008) and Le Boterf's framework of complex situations (2003), both with the same composition of items in the scenarios before and during the COVID-19 pandemic.

The first factor comprises the items "conceptualization", "diagnosis and use of concepts", "use of socialized power", and "use of unilateral power", related to the use of reasoning for creating and converting ideas and plans into reality, use of power and influence to develop people networks and hierarchies, and mobilization to achieve goals. It was symbolically named 'reasoning and power'.

The second factor includes the items "knowing how to learn and learning how to learn", "knowing how to get involved" and "knowing how to combine resources and mobilize them in a context", which cover knowledge development in favor of initiative, action, technology practices, and diagnosis of solutions. It was named 'knowledge and achievement'.

The items "self-evaluation and critical sense", "group management" and "self-confidence" are part of the third factor and linked to the identity of oneself and of groups, to their perspectives of beliefs, values, and ideas, as well as to the continuous assessment of behaviors inherent to achieving accomplishments. In this study, this factor was named 'confidence and group goal-building'.

The fourth factor comprises "memory", "specialized knowledge", and "perceptual objectivity". It includes the actions of experience, practice of theories, and objective models of action in the face of subjectivity, and was named 'experience and action'.

Assessment of the change in importance assigned to managerial competencies: before and during the COVID pandemic

This topic presents the analysis of the variation in importance attributed to managerial competencies before and during the pandemic, using the factors formed in the previous stage. Actions that have changed in importance are those where Sig < 0.05. Data are shown in Tables 6, 7, 8, and 9.

In factor 1, reasoning and power (Table 6), only the competencies "use of socialized power" and "use of unilateral power" showed a difference in importance before and during the pandemic.

Table 6
Probability of items in Factor 1, paired 2 by 2, being equal

Factor 1: reasoning and power Indicators		Before (Conceptualization)	Before (Diagnosis and use of concepts)	Before (Use of socialized power)	Before (Use of unilateral power)
During (Conceptualization)	Z Sig	- 0.485* 0.628			
During (Diagnosis and use of concepts)	Z Sig		- 0.177* 0.860		
During (Use of socialized power)	Z Sig			-2.028* 0.043	
During (Use of unilateral power)	Z Sig				-2.952* 0.003

Source: Elaborated by the authors.
* Based on negative ranks.

In Factor 2, knowledge and achievement (Table 7), only the competence "Knowing how to combine resources and use them in a context" showed differences before and during the pandemic.

Table 7
Probability of items in Factor 2, paired 2 by 2, being equal

Factor 2: knowledge and achievement Indicators		Before (Knowing how to learn and learning how to learn)	Before (Knowing how to get involved)	Before (Knowing how to combine resources and use them in a context)
During (Knowing how to learn and learning how to learn)	Z Sig	-0.943* 0.346		
During (Knowing how to get involved)	Z Sig		-1.454* 0.146	
During (Knowing how to combine resources and use them in a context)	Z Sig			-2.161* 0.031

Source: Elaborated by the authors.
*Based on negative ranks.

In Factor 3, confidence and group goal-building (Table 8), none of the competencies showed a difference in respondents' evaluations.

Table 8
Probability of items in Factor 3, paired 2 by 2, being equal

Factor 3: confidence and group goal-building Indicators		Before (Self-evaluation and critical sense)	Before (Group management)	Before (Self-confidence)
During (Self-evaluation and critical sense)	Z Sig	- 0.905* 0.365		
During (Group management)	Z Sig		- 0.379* 0.705	
During (Self-confidence)	Z Sig			-1.041* 0.298

Source: Elaborated by the authors.
* Based on negative ranks.

In Factor 4, experience and action (Table 9), only the 'memory' competence showed a difference before and during the pandemic.

Table 9
Probability of items in Factor 4, paired 2 by 2, being equal

Factor 4: experience and action Indicators		Before (Memory)	Before (Specialized knowledge)	Before (Perceptual objectivity)
During (Memory)	Z Sig	-2.380* 0.017		
During (Specialized knowledge)	Z Sig		-1.241* 0.214	
During (Perceptual objectivity)	Z Sig			- 0.297* 0.767

Source: Elaborated by the authors.
*Based on negative ranks.

DISCUSSION OF RESULTS

First, the group of managerial competencies named "reasoning and power" provided evidence that the "use of socialized power" and the "use of unilateral power" had changed their importance, before and during the pandemic. They show managers trying to influence people to do their duties. The pandemic brought feelings and emotions to the work environment that could lead workers to productivity loss, demotivation, dissatisfaction, and fear (Abras, 2021), especially of losing their jobs, contamination by the virus, and death, demanding a lot of emotional balance from managers (Boaytzis, 1982; Mattingly & Kraiger, 2019).

In this scenario, managers were challenged to build coalitions and political networks that didn't exist before, as a way to perform tasks, and realize the need to influence others in search of compliance and commitment (Boyatzis, 1982, p. 148), in order to continue the work. They noticed a greater need for these skills, since they are the main employees responsible for running the organization through people (Phillips et al., 2020; Brandão et al., 2010; Freitas & Odelius, 2018), and had to strengthen the ability to influence people to work with enthusiasm for the organization (Paes et al., 2021; Phillips et al., 2020; Hansen et al., 2020; Jansen et al., 2020), especially given the difficulties for changing individuals' behavior (Jack et al., 2023).

Another ability that stood out and showed a difference in importance before and during the pandemic was "knowing how to combine resources and mobilize them in a context", which involves matching personal resources and those of their environment, including the resources from the network of relationships in specific situations (Le Boterf, 1999; 2003). For Boyatzis (1982), among a manager's competencies, it is essential to know how to organize the resources efficiently to achieve results. During the pandemic, this skill proved very useful to managers, who noticed changes in its importance, since they had to understand the context of operation, identifying and making sense of the situation they were going through (Matarazzo et al., 2020), in order to know the necessary resources available and mobilize them.

In the pandemic scenario, with all the changes that took place, the resources available to managers were significantly modified, especially human resources, which were reduced due to the constant contamination of workers. On the other hand, social isolation led to closing restaurants and bars, forcing people to stay at home and prepare their own meals. To do that, they started buying more in supermarkets (Abras, 2021), which resulted in an increase in sales, including delivery and online. This brought significant changes to their operation, as highlighted by Abras (2020, p. 6): "All stores in the sector began a race to make the necessary adaptions for their operation, according to health authorities' guidelines, while leading with new and unpredictable challenges". To cope with that, managers had to mobilize resources often outside their organizations, such as couriers and online sales platforms.

The last significant skill that indicated a change in importance before and during the pandemic was "memory". Boyatzis (1982) mentions it in association with the others. In his view, for any action, the manager will have to remember events and facts in the context of use. Managers' perception during the pandemic can be associated with the fact that it caused many changes and very quickly, as the following excerpt highlights: "Specifically regarding supermarkets, everything changed overnight" (Abras, 2020, p. 36). Therefore, managers were challenged every day to make decisions on situations that were still ongoing, forcing them to recall events and decisions made at another time of crisis. This situation can be associated with what Le Boterf (2003) highlighted in "knowing how to learn and learning how to learn", when he emphasized the need to learn lessons from experience, adjusting actions to circumstances, diagnosing solutions, and adapting the problem to assimilation frameworks, understanding new information and incorporating it to existing solutions.

On the other hand, most competencies did not change in importance in the respondents' perception. This is relevant because, despite the idea of contextualization present in most definitions of managerial actions (Boyatzis, 1982; Le Boterf, 2003; Freitas & Odelius, 2018; 2022), even in situations of deep changes, such as COVID-19, not all competencies have changed in importance for these managers, which may indicate that they have a stock of potential skills (Freitas & Odelius, 2018) that, in fact, are brought into practice when needed.

Some competencies follow the manager's professional career and, in his/her perception, are useful in any context (Le Boterf, 1999), as they do not change with changing scenarios. This applies especially to those focused on more personal attitudes, such as "knowing how to get involved", "self-confidence", "self-evaluation and critical sense", "knowing how to learn and learning how to learn" and "perceptual objectivity". By their designation, it may seem that his/her personality traits, personal attributes (Freitas & Odelius, 2018), or involvement are being measured. A manager can also feel that he/she is already very involved with the firm, regardless of the scenario. In addition, as a part of personality traits, even if it is necessary to change them, there is a known difficulty in changing behaviors (Jack et al., 2023).

Something similar may occur with competencies associated with managers' level of knowledge, like "specialized knowledge", "conceptualization", and "diagnosis and use of concepts", which, in their perception, can measure their technical knowledge of the area. The answers may be affected by the feeling of overvaluing their skills. This could be a focus for studies on managerial competencies to confirm if there is a need to change the importance of these actions, depending on the context. It could also be checked if this result is associated with the difficulty of accepting and wanting to change one's own behavior, which would be in line with previous studies that highlight the limitations in processes of changing leaders' behaviors (Boyatzis, 2008; Taylor et al., 2019).

Another reflection can be made based on Caldas et al. (2020), on the extent to which managerial competencies are associated with managerial performance, contrary to a significant part of the literature that seeks to associate manager's qualities and performance (Phillips et al., 2020; Clifton & Harter, 2019; Levenson et al., 2006; Brandão et al., 2010). Maybe managers' answers in this sample were influenced somehow by this understanding; therefore, it does not matter the context of use of these competencies. Further studies could also focus on understanding to what degree knowing the relationship between managerial actions and performance can affect the importance assigned to actions, in different contexts.

However, discussions on the contextualization of managerial competencies, despite being taken for granted, are not deepened. Therefore, this study suggests that managers should be more able to notice which skills are useful in each context and start using them, since the time for developing new competencies can be long, which would compromise the company's survival, as would occur from the perspective of the population ecology theory (Hannan & Freeman, 2005).

FINAL REMARKS

This article sought to analyze, from the perspective of managers, changes in the importance attributed to managerial competencies in the Brazilian retail segment, as a result of COVID-19. When comparing the importance assigned to them before and during the pandemic, by considering exploratory factor analysis and establishing four factors - reasoning and power, knowledge and achievement, confidence and group goal-building, and experience and action - we observed that managers pointed to "use of socialized power", "use of unilateral power", "knowing how to combine resources and mobilize them in a context", and "memory" as the most relevant factors.

The arguments and results presented are significant for leaders and followers, acting or not in the supermarket retail sector, as well as for all those who are part of the formation, evolution, and suitability of these actions in the organizational context. The survey of managers' perception on this knowledge in contexts of change, such as caused by COVID-19, enables the creation of academic parameters and information to be used in organizational guidance.

By addressing the changes caused by these actions, this study shows the need for managers to distinguish which competencies should be used in each context. In addition, it allows a reflection on the importance of widening the set of actions potentially available to each manager, since changes in context can be fast enough and offer no time to develop practices suitable to the new scenario.

Despite its contributions, this article has some limitations. First, the size of the sample; although appropriate for the type of analysis used, it is small and does not allow extrapolations, even for the chosen segment. Hence, we suggest further studies to increase the sample within and outside the type of business studied, as a way of extending knowledge on this subject. Another relevant limitation concerns the method of data collection through a closed questionnaire, which limits the competencies presented to participants, leaving out qualities addressed by different authors, and others that may arise. Future studies could use qualitative research presenting managerial competencies that are not on any list yet.

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DATA AVAILABILITY

The entire dataset supporting the current findings is available upon request to the corresponding author (Lucas Eugênio de Andrade Silva). The dataset is not publicly available due to the possibility of compromising the privacy of research participants.

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