Programa de Pós Graduação em Administração-FURB ISSN 1980-4431 Brasil

# 

# **REVISTA DE NEGÓCIOS**

Inovação e Estratégia em Organizações



# **Contents** Volume 28, Number 2, April, 2023

# Articles

**Dividendos e Crises: Efeitos Nas Empresas Sustentáveis e Demais Companhias Da B3** ....23 Murilo Alves Santos, Me.; Edson Alves Ferreira, Me.; Miguel Hernandes Júnior, Me.; Arthur Antonio Silva Rosa, D.r.; Karem Cristina de Souza Ribeiro, Me.

**Improvisation in academic management: a case study in a Brazilian public university**.....40 *Arthur Silva; Lucilaine Pascuci, D.ra.; Victor Meyer Jr.* 

### **Vegetarian Diets and Their Multciple**

# APRESENTAÇÃO GERAL

A Revista de Negócios está localizada em Blumenau, estado de Santa Catarina, Brasil, no campus da Universidade Regional de Blumenau-FURB, Programa de Pós-Graduação em Administração - PPGAd. A Revista de Negócios é publicada trimestralmente nos meses de janeiro, abril, julho e outubro no site furb.br/rn.

POSTMASTER: Universidade Regional de Blumenau-FURB, Rua Antônio da Veiga, 140 - Victor Konder, Blumenau -SC, 89012-900. Department: PPGAD/FURB - D102.

# MISSÃO

Fornecer um espaço para debates acadêmicos e práticas relevantes na área de gestão de negócios, promovendo a produção e disseminação de conhecimento por meio da publicação contínua de artigos, permitindo a contribuição de pesquisadores e profissionais em suas áreas de atuação.

# **FOCUS E SCOPUS**

A Revista de Negócios visa criar uma plataforma intelectual e acadêmica, sob a ótica da Gestão Estratégica e da Inovação nas Organizações. A Revista busca e analisa contribuições para o debate sobre pesquisas em dois temas específicos: inovação e competitividade e estratégia em organizações. O tema inovação e competitividade abrange todos os estudos e pesquisas relacionados a como as organizações podem sustentar sua competitividade, principalmente com foco em inovações, empreendedorismo e performance. O segundo tópico abrange estudos e pesquisas sobre gestão estratégica das organizações, mais especificamente sobre como as empresas podem ou devem atuar no nível estratégico olhando principalmente, mas não apenas, para o contexto externo, cadeia de suprimentos, estratégias competitivas no mercado internacional e abordagem de marketing.

A política editorial baseia-se na promoção de perspectivas artigos com críticas e contribuições específicas de estudos teóricos e empíricos que contribuam para o avanço das relacionadas à teorias inovação e competitividade e gestão estratégica das organizações. São bem-vindos estudiosos que trabalham especialmente em tais tópicos para enviar ensaios teóricos, estudos empíricos e estudos de caso. A Revista de Negócios está aberta a diferentes perspectivas metodológicas e abordagens inovadoras sobre o papel das organizações.

# **PÚBLICO-ALVO**

O público-alvo da Revista de Negócios é composto por pesquisadores, professores e alunos de graduação e pós-graduação em Administração e áreas afins, assim como profissionais do mercado no campo da gestão pública e privada.

# ESTRUTURA EDITORIAL

# **O** Editor

Leomar dos Santos, Prof. D.r Postgraduate Program of Business Administration Regional University of Blumenau - FURB rn@furb.br

# **Designer Editor**

Giovanni Augusto Patrício Postgraduate Program of Business Administration Regional University of Blumenau – FURB <u>gpatricio@furb.br</u>

# **Production Editor**

Paulo Sérgio Reinert Postgraduate Program of Business Administration Regional University of Blumenau – FURB preinert@furb.br

# EDITORIAL COMPOSAL BOARD

# **Executive Board**

Coeditor Júlio Cesar Lopes de Souza, D.r Postgraduate Program of Business Administration Regional University of Blumenau - FURB juliolopes@furb.br

English Language Editor Prof. Marta Helena Caetano, MA. FURB Language Center Regional University of Blumenau - FURB <u>mhelena@furb.br</u>

System Suport Marcos Rogério Cardoso, University Library Prof. Martin Cardoso da Veiga Regional University of Blumenau - FURB <u>mcardoso@furb.br</u>

# **Academic Board**

Luciana Lazzeretti, Prof, Dr. Department of Management University of Firenze <u>luciana.lazzeretti@unifi.it</u> Mohamed Amal, Dr. Postgraduate Program of Business Administration Regional University of Blumenau - FURB amal@furb.br

Shaker A. Zahra, Prof, Dr. Strategic Management and entrepreneurship department Carlson School of management -University Minnessotazahra004@umn.edu

Tales Andreassi, Dr. Postgraduate Program of Business Administration Getúlio Vargas Institution SP – FGV <u>tales.andreassi@fgv.br</u>

of

# **Institutional Board**

The Institutional Board is consisted by the academic community of Regional University of Blumenau - FURB.

Marcia Cristina Sardá Espindola, Prof, Dra. Rector of Regional University of Blumenau – FURB <u>reitoria@furb.br</u>

Marcus Vinicius Marques de Moraes Vice - Rector of Regional University of Blumenau - FURB reitoria@furb.br

Michele Debiasi Alberton Dean of Postgraduate Studies, Research and Culture - PROPEX Regional University of Blumenau - FURB propex@furb.br

Ciel Antunes de Oliveira Filho, Prof, Director of Applied Social Sciences Regional University of Blumenau - FURB <u>ccsa@furb.br</u> Mohamed Amal, Prof. Dr. Coordinator of the Postgraduate Program of Business Administration Regional University of Blumenau - FURB ama@furb.br

Leomar dos Santos, Prof, Dr. Head of Business Administration Department Regional University of Blumenau – FURB <u>leomar@furb.br</u>

Joares Pescador Lemes De Campos Director of University Library Prof. Martin Cardoso da Veiga Regional University of Blumenau - FURB <u>furbbc@furb.br</u>

Bruno Thiago Tomio, D.r Head of International Relations Office -FURB Regional University of Blumenau - FURB cri@furb.br

Fernanda Ostetto, Profa. Head of Marketing and Communication - FURB Regional University of Blumenau - FURB <u>ccm@furb.br</u>

# **Past Editors**

2023-2023 Leomar dos Santos e Júlio Cesar Lopes de Souza 2019 - 2022 Luciano Castro de Carvalho 2018 - 2019 Mohamed Amal e Marianne Hoeltgebaum 2016 - 2017 Marianne Hoeltgebaum 2014 - 2015 Edson Roberto Scharf and Marianne Hoeltgebaum 2012 - 2013 Edson Roberto Scharf **2010 - 2011** Leomar dos Santos 2008 - 2009 Denise del Prá Netto 2006 - 2007 Mohamed Amal 2004 - 2005 Gérson Tontini 2002 - 2003 Emerson Maccari. Valeria Riscarolli, Luciano Rosa and Paloma Zimmer 2000 - 2001 Emerson Maccari 1998 - 1999 Gérson Tontini, Denise Del Prá Netto and Valeria Riscarolli

**1996 - 1997** Denise Del Prá Netto



# Vivien Mariane Massaneiro Kaniak, D.ra.

Doutora em Administração Universidade Federal do Paraná E-mail: <u>vivikaniak@gmail.com</u>

# **Rivanda Meira Teixeira, D.r.** Doutora em Administração

Universidade Federal do Paraná E-mail: <u>rivandateixeira@gmail.com</u>

# Ana Carolina Vilela Carvalho, Me.

Mestre em Administração Universidade Federal do Paraná E-mail: <u>acvcarvalho@gmail.com</u>

# Andréa Paula Segatto, D.ra. Doutora em Administração Universidade Federal do Paraná

E-mail: andreapsegatto@gmail.com





Received 15.06.2021 - Reviewed 03.03.2023 - Accepted 06.05.2023 ISSN 1980 -4431 Double blind review



# Abstract

This article aims to describe the dynamic of a university innovation and entrepreneurship ecosystem, as well as the actions developed by a private university in southern Brazil to create it. Through a descriptive qualitative approach, the research strategy consisted of a case study in which data were obtained through six interviews, non-participant observation, and documentary analysis. The results demonstrated that the university managed to reach an innovation and entrepreneurship ecosystem once they reinforced favorable institutional conditions for entrepreneurship and developed a structured department of entrepreneurship education that gives support to future entrepreneurs. Once the theme has not yet been widely explored in the literature, this article aims to contribute both to broaden the debate and to present a case of a South American private university that may serve as a model for other educational institutions that wish to create or reinforce their university innovation and entrepreneurship ecosystems.

**Keywords:** Innovation. Entrepreneurship. University ecosystems. University entrepreneurial activities.

# **1** Introduction

Research on entrepreneurial universities has devoted special attention to understanding how university innovation and entrepreneurship ecosystems have been transforming the environment around them while increasing levels of support for the entrepreneurial academic community (Guerrero et al., 2020; Moraes et al., 2020). The universities modify their main teaching, research, and extension activities to emphasize the transfer of generated knowledge (Berggren, 2017), this process culminates with entrepreneurial ecosystems that offer multiple alternatives to boost the main objectives of their actors involved such as government, industry, academia, students, and users (Koslosky et al., 2015; Guerrero et al., 2020; O'Kane et al., 2020).

Thus, there is a tendency for universities to seek cooperative relations between the productive sector while they play a prominent role in the local development in which they are inserted (Koslosky et al., 2015). According to Cai et al. (2020), this movement meant that higher education was more than ever intertwined with the economic, social, and environmental demands of the post-contemporary world. It ended up generating a new research agenda for understanding the new role of universities in innovation ecosystems (Cai et al., 2020; Guerrero et al., 2020; O'Kane et al., 2020). Although there is still little literature dealing with the issue of university innovation and entrepreneurship ecosystems (Koslosky et al., 2015; Link and Sarala, 2019; Moraes et al., 2020; Barros and Paixão, 2021) it is believed that both university and society yearn for new roles in the performance of higher education and its positive consequences for the community (Cai et al., 2020).

To contribute to this debate, this study is based on Cai et al. (2020) concept of innovation ecosystem, which is defined as having co-innovation networks, in which the actors of organizations are concerned with production of knowledge and wealth creation by interacting with each other in the formation of coevolution and interdependent relationships in trans geographic contexts. Also, new ideas and approaches from various internal and external sources are integrated to generate shared values that aims to the transformation of the society.

This study is based on the description and analysis of the case of the innovation ecosystem of PUCPR, which presents itself as the only private university in the state of Paraná to have developed an ecosystem of university innovation and entrepreneurship (Kaniak, 2020). It is believed that immersion in its history, purposes, and entrepreneurial activities can contribute in a practical way to other universities that wish to follow its model, especially in the Brazilian context, that still lacks the development of entrepreneurial universities (Alves et al., 2019). Therefore, the present research aims to describe the dynamic of a university innovation and entrepreneurship ecosystem, as well as the actions developed to create it.

This article is structured as follows, in addition to the introduction, there is a theoretical reference topic articulating ideas of authors that served as a basis for this work. After the methodological procedures are presented followed by the description of the case, the presentation of the results and analysis and concluding with the final considerations.

 $\mathbf{0}$ 

### 2. Theoretical Reference

2.1 University entrepreneurship activities

Universities have a unique potential to stimulate entrepreneurship. According to Baldini et al. (2015), academic entrepreneurship can be understood as the involvement of a university in activities related to the commercialization of research, including formal mechanisms, such as academic spinoffs, patents, industry-university collaborations, and licensing. In addition, there are other kinds of arrangements like consultancy, networking development and activities related to industrial partners. Perkmann and West (2015) report that the academic space has great strength in its human capital, and universities can become the cradle of technological innovations and developments, especially if carried out in partnership with the government and/or companies.

In the technology transfer process, ideas are generated, expanded by complementary knowledge, and transformed into salable goods in the market, generating innovation and social wellbeing (Chais et al., 2018; Cunningham et al., 2017; Pertuzé et al., 2010). In Brazil, university innovation agencies or Technological Innovation Centers (NITs) act as an "intermediary" between innovation providers (university scientists) and those who can potentially help commercialize these innovations (companies, entrepreneurs, and venture capitalists) (Sartori, Spinosa and Nogas, 2017). Thus, the transfer of technology from academic institutions has been seen as a strategic condition, both for companies and the technological development of countries to face the challenges of a global economy (Santos et al., 2020; Audretsch et al., 2014; Bengtsson, 2017).

Much of the transfer of technology from the academy to the market comes from the generation of intellectual property by the university. As explained by the USP Innovation Agency (Auspin, 2021), the intellectual property covers two major areas: industrial property (patents, trademarks, industrial design, geographical indications, and protection of cultivars) and copyright (literary and artistic works, programs computer domains, Internet domains, and immaterial culture). For Pereira (2011), the intellectual property comprises the right of an individual or a legal entity to a movable intangible asset.

Another mechanism developed by universities is business incubators. They are organizations created to host and support micro and small companies to enable their initial development or even their creation (Azevedo et al., 2016; Steiner et al., 2013). Engelman and Fracasso (2013) highlight that university incubators are an important tool to accelerate the growth and success of new companies through managerial support, with services and resources. In addition, they must have infrastructure, training, human resources, and advice, offering specialized services to assist tenant companies in their activities. Incubators also aim to facilitate fundraising from development agencies or potential investors to accelerate the performance of companies originated in the university (Neves and Franco, 2019; Suzuki and Okamuro, 2016; Padilla-Meléndez et al., 2020).

Companies incubated within the university are generally called university spinoffs, which consist of companies that have emerged based on knowledge, skills or ideas that the founders (usually students or even teachers) have generated at the university (Heblich and Slavtchev, 2014). According to Pattnaik and Pandey (2016), to be considered a university spinoff, the company needs to bring together four major characteristics: the parent organization, whose innovation is coming out, must be a university or academic institution; the result that derives must be a separate legal entity, not an extension of a controlled body of the university; should explore the knowledge produced based on academic activities and must be geared towards the generation and commercialization of technology, distancing itself from a non-productive organization.

In addition to the actions mentioned above, more punctually ones are also carried out such as consultancies, lectures, and events with partnerships outside the university, which foster networking and reinforce the entrepreneurship ecosystem. These actions consist of other forms of university-company-society engagement and are activities different from those that are formally registered in the contract or that take place via protocol processes (Fuller and Pickernell, 2018). All these activities support the emergence of ecosystems that foster entrepreneurship and innovation in the university environment.

# 2.2 University entrepreneurship and innovation ecosystems

ccording to several authors, there is still a gap in the literature regarding the conceptualization of innovation ecosystems (Koslosky et al., 2015; Barros and Paixão, 2021). Historically Moore (1993) was the first to use the term relating it to the idea of an economic community that, through the foundation of interactive organizations, acts cooperatively. Later, following this conception, Saxenian (1994) referred to regional innovation ecosystems as locations that act by transmitting and absorbing knowledge. Christensen and Rosenbloom (1995) expanded the idea to a commercial nest where each actor contributes with specific components to find a solution to a problem. Powell et al. (1999) added that research universities are very important for successful cluster formation as they contribute to the advancement of science and technology.

Ecosystems exist nationally, regionally and at the community level. Nevertheless from this millennium onwards, it is observed that there is an increasing interest in studying ecosystems especially related to universities (Morris et al., 2017). For Carvalho et al. (2010), universities have a crucial position in promoting ecosystems of innovation due to their collaboration with actors such as the government, business associations, entrepreneurs, NGOs, service providers, and incubators.

For Hayter (2016) the concept of university entrepreneurial ecosystem is associated with the action of university spinoffs and their impact in terms of networking, and providing resources and connections that lead to the success of the ecosystem. Therefore, the role of knowledge intermediaries, which include technology transfer offices (TTOs), incubators, science parks, university funding, angel investors, cooperative research centers, and industry consulting practices are essential.

Another definition is found in Yi & Uyarra (2018) which point to the academic entrepreneurial ecosystem as composed of multidimensional enterprises supporting the development of entrepreneurship through various initiatives related to teaching, research, and dissemination. For these authors, a set of academic entrepreneurial actors (for example, universities, research institutions, companies, venture capitalists) and factors (for example, university leadership, governance and entrepreneurial capacity, markets, support scenario, and so on), must coexist and interact through the entrepreneurial academic process.

Additionally, the concept of Triple Helix is also relevant to this topic. Etzkowitz and Zhou (2017) describes that the Triple Helix constitutes an innovation model in which the university/academy, industry and government, as primary institutional spheres, interact to promote development through innovation and entrepreneurship. Etzkowitz and Leydesdorff (2000) explain that the university has undergone a major transformation in its role for economic and social development. From the 19th century, the university incorporated research into its teaching mission. By the end of the Cold War, it advanced in its function, including economic development, generating new industries and companies.

In view of the relevance of knowledge in society for the generation of wealth, universities gained prominence, equivalent to government and industries, as observed by the regional development demonstrated by Stanford University and Massachusetts Institute of Technology, examples of Entrepreneurial Universities. In this way, university is relevant in playing a creative role in social and economic development, as it manages to understand the needs of citizens, government and industry (Etzkowitz and Zhou, 2017)In this way, university innovation and entrepreneurship

Revista de Negócios, v. 28, n. 2, p. 6-22, April, 2023.

σ

ecosystems rely on the relevant collaboration of entrepreneurial universities, which offer a critical contribution to the factors of production, which leverage social and economic development, while enabling the improvement of human capital, knowledge capital, and entrepreneurship capital (Guerrero et al., 2020; Chais et al., 2018). Additionally, Koslosky et al. (2015) highlight that the innovation ecosystem encompasses the notion that in this environment, businesses will be catalyzed, supported, and sustained, generating value, and impacting society by developing the interaction and flow of information between more diverse actors.

# 3. Methodological procedures

This research is considered qualitative and descriptive since it aims to explain the social phenomenon with the least possible distance from the natural environment in which takes place (Merriam, 2009). Thus, it was sought to understand the processes described by the agents from their singular interpretation in their social world (Godoi et al., 2006). In addition, it is an interpretative case study that investigates a contemporary phenomenon within its real-life context, to capture and understand the dynamics of an organization in its formal and informal established activities, obtaining a rich description of the phenomenon and developing conceptual categories that illustrate it (Godoi et al., 2006).

This research is qualitative in its assumption once the research participants and the phenomenon were understood from their perspectives (Bauer and Gaskell, 2002). The nature of the research is descriptive, since the researcher did not interfere with the facts, which were recorded, analyzed, classified, and interpreted (Raupp and Beuren, 2003). To maintain the validity of the construct in this research, according to the recommendations of Eisenhardt (1989), the triangulation of multiple sources of evidence (documents, interviews, non-participant observation) was adopted. To guarantee the reliability of the study, Yin's case study protocol (2009) was used, containing the procedures for collection in the research field, the study questions, and proposals, in addition to the guide for the final report. The data collected in the field, as well as memos and documentation, were gathered in a database and classified for analysis according to the studes of pre-analysis, exploration of the material, and treatment of the data together with the interpretation.

For Yin (2009) the case study investigates a phenomenon in-depth, and the single case study is adequate when analyzing a representative and unique case of a phenomenon. Following this orientation, the choice for this university was due to its model of acting in university entrepreneurship that carries singularities about other private universities. As presented in a thesis defended in the yesteryear by Kaniak (2020), the case of PUCPR can be considered distinct since it represents the only private university in the state of Paraná that has an innovation agency and managed to create an innovation and entrepreneurship ecosystem in few years' time.

Data collection was carried out in the second half of 2019 at the Pontifical Catholic University of Paraná (PUCPR). Six people personally involved in the university's innovation and entrepreneurship ecosystem were interviewed, namely: the director of the innovation agency, the coordinator of the innovation agency, a professor, the entrepreneurial education coordinator, the founder and member of an incubated spinoff at the university and the coordinator of a company that has a partnership contract with the university's technology park. The interviews lasted an average of 40 min and were recorded with the interviewees' authorization and later transcribed. To guarantee the validity, each transcribed interview was submitted to each interviewee for them to review it and/or correct its content. A field diary was used by the researcher to record observations and all the researched documents were kept in a database for further analysis. All the data was organized and stored using the Nvivo software as a tool.

The analytical categories and elements used in the analysis were:

Analytical Categories	Analysis Elements
University innovation and entrepreneurship ecosystem (Cai et al., 2020; Guerrero et al., 2020)	<ul> <li>History of the innovation agency</li> <li>Infrastructure</li> <li>Performance model</li> </ul>
Entrepreneurial activities developed at the university (Heblich and Slavtchev, 2014; Siegel and Wright, 2015)	<ul> <li>Generation of intellectual property</li> <li>Technology transfer processes</li> <li>Generation of collaborative partnerships</li> <li>Business incubation/spinoffs</li> <li>Lectures and events</li> <li>Support activities for entrepreneurial education</li> </ul>

Source: the authors (2021)

### 4. Case presentation

he Pontifical Catholic University of Paraná - PUCPR - is part of the Marist Group, created in 1817 by Marcelino Champagnat, in France. The Marist Group operates in the areas of education and concentrates its activities throughout the country. The institution is a private Catholic non-profit university that was created on March 14, 1959, by Archbishop of Curitiba Dom Manuel da Silveira D'Elboux. The foundation brought together seven institutions, among which were the faculties of Philosophy, Law, and Medicine (PUCPR, 2021).

Currently, the university has 9 "Schools of Knowledge" with 50 undergraduate courses, 16 stricto sensu Postgraduate programs, 1650 professors, and 280 laboratories. The academic structure of PUCPR on the Curitiba campus is formed by 8 national and 1 international school. The administration of each School is managed by the Academic Council, the School Decanate, the Course Collegiate, and the Course Coordination. In addition to the Curitiba campus, the university currently has 3 other campuses: Londrina, Toledo, and Maringá (PUCPR, 2021).

PUCPR's innovation ecosystem, called Hotmilk, is responsible for generating knowledge, innovation, and technology, through research, with a structure of more than 200 laboratories and 240 researchers. The areas of expertise include research, development, and innovation (R & D + i), open innovation, accelerator, and incubator for the development of spinoffs. In terms of research, development, and innovation, the institution has a portfolio of projects developed in partnership with major institutions and companies such as Bosch, Renault, Volvo, Nokia, the Bill and Melinda Gates Foundation. The incubator/accelerator offers complete structure, mentoring with market professionals, connection with investors and laboratories for the creation of prototypes to support spinoffs in all stages of development. Between 2018 and 2020, 98 new companies were accelerated (Hotmilk, 2021).

Hotmilk is located within the university's Tecnoparque, a group of buildings dedicated to the development and sharing of new technologies in partnership with several companies. It was created in 2014 to foster entrepreneurship and offer an enabling environment for the exchange of knowledge and attracting partnerships and resources (Hotmilk, 2021). The team consists of 18 people, being a director, innovation and entrepreneurship coordinator, a project coordinator, a legal coordinator, some teachers, analysts and commercial brokers.

In addition, other entrepreneurial activities are developed jointly with Hotmilk in a building on the campus called "Entrepreneurship HUB". This nucleus is focused on entrepreneurial education for university students who can learn and practice entrepreneurship from high school to graduate school (Hotmilk, 2021).

# 5. Results and analysis

n this section, the dynamics of PUCPR university innovation and entrepreneurship ecosystem will be described as well as the entrepreneurial activities that support it, and the analysis of the data obtained will be compared with the literature.

Historically, at the Pontifical Catholic University of Paraná there was a change in the name of the nucleus responsible for managing entrepreneurial activities, which went from 'PUCPR innovation agency' to 'Hotmilk PUCPR innovation ecosystem', as explained by E1, coordinator of Hotmilk:

Now we are "killing" the PUC agency innovation name and making it: Hotmilk innovation ecosystem. We want to work our brand for the market because a very strong concept has been created that is difficult to explain, we have the innovation park, the innovation agency, Hotmilk, there are many names, one doesn't need that. We are PUC's innovation ecosystem (E1).

The coordinator also describes that initially, in 2012, the activities of the PUCPR innovation agency were more focused on the generation of intellectual property and there was no incubator for the spinoffs, an activity that only appeared a few years later. The importance of intellectual protection activities that existed before the formal creation of innovation centers in universities was also pointed out by Castro and Souza (2012) who affirm that the application for patents had already been carried out by countless institutions before the introduction of the Law of Innovation. The Innovation Law, dated 2004, in Brazil, sought to promote partnerships between universities and companies and established the mandatory creation of Technological Innovation Centers in public research centers and high education institutions in the country (Paranhos et al., 2018).

Currently, at PUCPR, the generation of intellectual property takes place within each school of the university through research carried out by teachers and students. Schools are in constant contact with Hotmilk. As explained by E2, professor at the university, schools have their innovation programs:

Within the School of Medicine, which is the school I work at, we have a program called HIPUC. So, this program is about innovation in the health area that involves new technologies (E2).

Each program works by creating inventions that will possibly in turn, be forwarded to patent applications. E3, director of Hotmilk, points to the importance of transferring the technologies developed at the university:

Another challenge for us is to transform more and more research into business, to make the transfer. This is one of our focuses: maximizing the impact of research (E3).

For the aforementioned interviewee, technology transfer processes at universities must go beyond invention and patent application. He even makes a self-criticism about the number of patents generated versus the number of transfers or licenses to the market:

Today, as in any university, we have a zillion patents shelved, which no one buys, but we want to increasingly enhance this (E3).

A similar finding was also made in the study by Dias and Porto (2014), who claim that Brazilian universities tend to place a greater emphasis on the patent application and grant than on licensing, resulting in little value addition, in terms of innovation, for the market. However, although the fact that having more or fewer patents granted should not in itself constitute a factor of performance definition for entrepreneurial universities (Abreu and Grinevich, 2013), it is still an

important indicator for obtaining good positions in university rankings, which perhaps explains this contrast.

Thus, E3 believes that an effective way to facilitate technology transfer is via spinoffs, as they are smaller and more agile companies and, therefore, tend to explore the commercial application of inventions more quickly. He exemplifies this issue by telling about an entrepreneur that was incubated at Hotmilk:

We have an example of a spinoff here that used one of our inventions commercially (...) In fact, of all the companies that came here, this was the one that expanded the fastest and received the most investments, it belongs to a professor of ours. They grew from 6 people to 49 in 1 year and a half. So, we want to see more examples like this inside here (E3).

 $\mathbf{m}$ 

The director's consideration is in line with Miranda et al. (2018) who affirm that, currently, universities have focused on the creation of university spinoffs as the main means of transferring technology arising from their activities.

On the other hand, E2, an interviewed professor, points to the difficulties that Brazilian universities face concerning the transfer of technology to established companies, due to cultural factors:

What is a big difference between Brazil and Silicon Valley, for example, is that I think that the companies here are very distant. If you invite a company to participate in an innovation project, they like the idea, they think it's wonderful, they even participate in the event, attend the lectures, send speakers ... but for them to invest money in the development of the project, then ask for the licensing of technology, no, they don't have this culture (E2).

Cultural barriers that interpose in the technology transfer processes in Brazil have also been pointed out in previous studies (Dias and Porto, 2014; Gonçalves and Tomaél, 2015; Volles et al., 2017). For these authors, the most cited aspects are: lack of a culture focused on socioeconomic entrepreneurship (Volles et al., 2017); companies withdraw from the partnership because of the high costs of research and the length of the process (Gonçalves and Tomaél, 2015); lack of an institutional university policy adequate to its role as an innovative agent (Dias and Porto, 2014).

Singh et al. (2020) also found, in a study related to the challenges faced by TTOs or NITs in Southern Brazil, that the main difficulty faced was linked to cultural aspects such as the lack of a culture that excels in the interaction between university-company and deficiencies in communication and dialogue with the market. However, differently from the results pointed out by the referred authors, in the specific case of PUCPR, analyzing the documents related to the strategies used to publicize their services to companies, it was observed that PUCPR innovation agency invests a lot in communication, having included a professional specialized in the field on the team. Perhaps this fact helps in the institution's proximity to the market. Another argument is that PUCPR being a private institution by its nature, may have greater agility in decision-making and communication issues if compared to the public high education institutions in the country.

Regarding the generation of collaborative partnerships, more specifically, all interviewees stressed that the university seeks to foster relationships that bring benefits to all involved. E1 explains that many companies initially approach only for the interest in attracting talent among students:

Many companies want to get close to us due to the issue of qualified labor, they want to find professionals for them among our students (E1).

It was exactly the case that started the partnership formed between PUCPR and a well-known company in the health services area. The company aimed to attract young people with talent and experience in spinoffs. E1 says that many partnerships start like this, with a company in search of talents, but then the partnership solidifies and encompasses other interests:

Many opportunities come to us, and the catalyst is the companies' need for qualified labor (...) With this company, it was like that, and afterwards we suggested a cooperation term and started an open innovation program with them (E1).

The strategy punctuated by the interviewee is aligned with others found in the literature. In addition to the main objectives of the partnerships, there is a range of mechanisms that generate other kinds of collaboration, interaction, and cooperation and expand the initial objectives in other forms of benefits for institutions (Guerrero et al., 2014; Guerrero, et al., 2020; O'Kane et al., 2020). Still, according to Kruss and Visser (2017), the factors that lead a company to collaborate with the university are multiple. However, the authors argue that more innovative companies tend to be more interested in establishing collaborations of this nature, which precisely explains the intention of university's partner that was interviewed for this study.

For O'Kane et al. (2020) universities that favor the transfer of their knowledge to companies not only receive an increase in their reputation but also end up increasing the attractiveness and satisfaction among academics. In the program developed in partnership between PUCPR and the health services company, the objective was to select spinoffs to solve the company main problems. The spinoffs with the best ideas went through a period of immersion with mentors who were company's specialists. In the end, the best projects, from the best spinoffs, had the opportunity to be contracted by the company to implant the projects. E4, the company coordinator, explains in more detail how the process happened:

The spinoffs selected in the project received space on the Hotmilk accelerator to test, validate and improve their proposal for products and services, and further development. In the end, the three best solutions were awarded, and we made room for them to test their proposals here within our company (E4).

Hotmilk coordinator adds that he and his team have been making an effort to disseminate this type of partnership that he calls "corporate open innovation programs":

We are consolidating this type of programs (corporate open innovation). The idea is to take this agile work methodology, spinoff mentality, and this culture of innovation into large corporations that partners with us. Today we are doing a pilot program with this company, but we want to consolidate this model in a near future (...) I think this is something that we do well and brings a great benefit to those involved (E1).

Regarding the incubation of companies, PUCPR has a spinoff incubator/accelerator that started in 2014. The director explains that today the incubation and acceleration of spinoffs is one of the main activities they perform:

We were able to create good programs and bring spinoffs, understand the stages of maturity of the spinoffs, and which methodology we need to give to support them and how to foster the networking of these companies into the ecosystem (...) another feature we have, is that the spinoffs can be a resident here, in the campus or outside, we have both of them (E3).

According to Noronha et al. (2014), there are two classifications for university spinoffs. Resident companies are those that occupy the infrastructure of the incubator or the university, developing their activities internally. Non-resident companies do not occupy physical space but receive the same advantages as residents in terms of managerial, financial, and technical support. In addition, the author points out that incubated companies often go through three incubation stages: pre-incubation, incubation, and post-incubation. Within this concept, the PUCPR incubator encompasses both types of incubation (residents and non-residents) and owns projects aiming at forming companies in the three mentioned incubation stages.

In addition, to support the management and provision of infrastructure, the coordinator interviewed points out that PUCPR main differential is to bridge the gap between spinoffs and investment funds. He states that the main objective of the contract between the university and the spinoffs is to facilitate their approach with investors, as explained by E1:

The purpose of the contract with us (university) is for us to be agents for attracting investments for them (spinoffs). They are in here, we are looking for investment funds. When the spinoff is at the correct maturity stage we connect them to funds or angel investors and if they stablish a contract, the university keep a part of it (E1).

PUCPR's strategy of bringing incubated spinoffs closer to investors is widely defended by several authors. Many postulate that the universities should prioritize access to investments as an essential factor for the growth of the spinoff (Wright, 2006; Suzuki and Okamuro, 2017; Neves and Franco, 2019). Hotmilk promotes this model and according to E1 the incomes from the successful agreements between spinoffs and investment funds are very lucrative. The university gets a percentage of the value of the agreement and invest in other startups at the initial stage, forming a virtuous cycle which ends up being a good deal for the three parties.

In addition to these eventual payments, the university also receives a monthly amount paid by the spinoffs to use the space and other benefits received. For interviewee E5, founder of one of the spinoffs interviewed, the monthly amount paid to the university is considered a good investment once it gives him the networking that he needs to boost the company:

> We started the spinoff in the incubation program, went through the levels and now we are in the Hotmilk acceleration program, which has a monthly cost but it is worth it for network (...) With their help I was able to talk to the director of Ifood, for example, he is the man who merged Itaú with Unibanco. So, these guys have experience, have a different world view of business, which I would not have access otherwise. So I think the connections that Hotmilk provides are excellent for us (E5).

The importance of the connections and networking enabled by universities is wide debated in the literature. Many of them highlights that the contact with researchers and experienced professionals to exchange knowledge, learning, and social capital is an important differential to university spinoff companies (Heblich and Slavtchev, 2014; Hayter and Cahoy, 2016; Eveleens et al., 2017). In this case, in addition to the networking approach with other entrepreneurs provided by the university, E1 adds that PUCPR also provides mentoring to its incubated business with professionals from the market and not only with academical professors. They also bring them for workshops and brainstorm sessions to be in contact with the students and the incubates entrepreneurs.

Abreu and Grinevich (2013), affirm that bringing speakers from companies and facilitating their dialogue with academics generates, above all, prestige and influence to their universities and ends up attracting a greater number of strategic partnerships. In addition, Galán-Muros et al. (2017) argue that giving industry lectures at the university generates a series of advantages for students' learning and approaching new partners.

At PUCPR, a good number of the spinoffs incubated at the university started their ideas in entrepreneurial education programs that are aimed at developing entrepreneurship in students. The coordinator of the Entrepreneurship Hub, E6, highlights the importance of this work. He believes that the entrepreneurial vision must be awakened from the beginning of school life, because even if the student do not become an entrepreneur, he might be a future professional or manager of a company that will have a greater openness to boost entrepreneurship.

The actions carried out by the Entrepreneurship Hub are divided into three categories: awareness, training, and execution, as explained by the aforementioned coordinator E6:

The first category is awareness-raising, which consists of lectures and workshops. The second is training, such as disciplines, longer courses, training projects. The third is our main execution program: Spinoff Garage, which lasts 1 semester, and PIBEP, which lasts 2 semesters. This is the time for the students get their hands dirty (...) After that, if the student really wants to enterprise, he can go to the Hotmilk accelerator and be incubated and accelerated (E6).

PUCPR's approach is in line with the ones defended by several authors who point out that universities and schools should implement entrepreneurial education programs and offer entrepreneurship courses at different educational levels and for different target participants (Abou-Warda, 2016; Kakouris and Georgiadis, 2016; Paiva et al, 2019; Hashimoto and Fonseca Jr., 2018). Similar to PUCPR case, Nyadu-Addo and Mensah (2018) and Kummitha and Majumdar (2015) also described entrepreneurial education programs that work the entrepreneurship issue among students and end up allowing the companies' incubation at the university, usually for best projects selected in the programs.

In addition, PUCPR strives to develop practical activities in its training, such as workshops and technical visits. Workshops take place within the partner companies and bring students closer to their reality. E6 mentioned the program called Spinoff Garage in which students are trained in their first mini companies. In this program, they can test their ideas, improve their performance, and ask questions to experts. "We try our best to make the students participating in the program experience which is like creating a company in practice" reports E6. These actions are in line with what describe Hashimoto and Fonseca Jr. (2018) that point out that educational institutions should be concerned with the instruction of students beyond the concepts of entrepreneurship, seeking experiences and learning inside and outside the classroom, in order to increase the chances of success of the future entrepreneur.

And it is precisely this practical approach that ends up creating some difficulties according to the same interviewed. E6 points out that the courses and programs developed by the Entrepreneurship Hub have a more practical focus which often clashes with the mentality of some teachers who have a more theoretical focus. Nevertheless, a practical approach in pedagogical activities for entrepreneurship is defended by countless authors as being the most effective (Abou-Warda, 2016; Kakouris and Georgiadis, 2016; Fayolle, 2010; Hasan, Khan and Nabi, 2017; Miller and Acs, 2017). These authors highlight the importance of experiential entrepreneurial activities with students as being more encouraging and impressing for their formation.

In order to carry out a comparative analysis, even if summarized, a successful case study of entrepreneurial ecosystems developed by a university was found, the Lancaster University case. Pugh et al. (2019) bring examples of programs developed over 20 years to support the entrepreneurial ecosystem in the North West of England. There were three successful projects highlighted:

- a) Program for small businesses developed in partnership with other organizations and universities in the region, promoting individual and peer learning;
- b) Incubation for startups supported by several universities, to offer support such as accommodation, training, mentoring and financing, as well as training for network learning;
- c) Program for regional learning to generate jobs and economic growth outside the big centers. It was developed by the University of Lancaster, in partnership with governmental organizations and 42 universities, 19 Chambers of Commerce and 17 Local Business Partnerships, as well a wider network of public and private partners, which offered a range of business support. A relevant aspect of the program was to develop an approach that would allow activities to be tailored specifically to the local context and the needs of local businesses. Moreover, by bringing different actors into a common environment, with the university as a neutral intermediary, the program provided a collective 'voice' for the formulation of policies.

This is the case of a university that has progressively and comprehensively developed initiatives for entrepreneurial learning. It provided a space for individual and collective learning, bringing interaction and reflection on the daily practices of entrepreneurs. It also promoted learning from and with others to facilitate overcoming challenges and sustained business growth. When comparing with PUCPR case, insights emerge. Both cases provided spaces for exchanging knowledge to improve ideas and businesses. However, Lancaster University developed programs for small businesses and partnerships with the government and other universities. These points can bring observations for PUCPR and the Brazilian context. For small businesses, the Brazilian Micro and Small Business Support Service (Sebrae) has proven to be a relevant player in the development of knowledge about entrepreneurship and it works nationwide. And the government presents bureaucratic barriers to partnerships, especially with private entities. Anyway, successful models are important to bring reflections and possibilities for improvement, especially when looking for inspirations for constructive partnerships.

To conclude, once analyzed the elements related to the innovation ecosystem of PUCPR, as well as the testimony of several of the actors connected to it and the documentation available, it was verified that the university managed to build an innovation and entrepreneurship ecosystem in five years' time. Though the period of 2014-2019 the institution was able to:

- a) Generate a system that works as a co-innovation network;
- b) Exchange efforts and knowledge production between the several actors of the system;
- c) Generate the creation of wealth and shared values;
- d) Obtain a prominent role in local development, impacting the regional ecosystem in which they function as both creator and member.

Another relevant aspect to highlight is the importance they deposit in having a structured department specialized in entrepreneurial education. This seems to be the basis that give support to all the entrepreneurial and innovative activities they develop in more advanced stages. The Entrepreneurship Hub, as they, named it, is responsible for planting the seeds of entrepreneurship in the students since their technical high school courses available in the institution until their graduates and pos-graduates. Finally, it could be attested that there were favorable institutional conditions that were, and still are, essential for the creation and maintenance of the university ecosystem.

# **6.** Final considerations

This article aimed to describe a case study of a university entrepreneurship ecosystem, located in Southern Brazil. A review of the literature in the area demonstrates that there is still a gap regarding the concept of university innovation and entrepreneurship ecosystems, as well as the description of cases of such universities. Therefore, this article sought to contribute theoretically to the debate by presenting the case of PUCPR's innovation and entrepreneurship ecosystem, as well as its dynamics. In addition, it was demonstrated how the studied university managed to evolve from a strategy primarily focused on developing intellectual property until it became a nucleus with complex actions that intertwine with the economic, social, and educational demands in its surroundings.

The analysis supports the conclusion that the referred university managed to reach a position of innovation and entrepreneurship ecosystem in few years' time once they invested in favorable institutional conditions for entrepreneurship, reinforced their innovation agency and prioritize a structured department of entrepreneurship education that gives incentives and the primary basis to future entrepreneurs that emerge in the university.

It is concluded that a university innovation and entrepreneurship ecosystem can be built in an environment that invests in integrated educational programs and infrastructure for their entrepreneurial activities such as: incubators, accelerators, technology parks, innovation agencies as well as a set of university favorable regulations. In addition, elements that strengthen the culture of

entrepreneurship, promotes a shared perception that partnerships are beneficial for everyone, and incentives networking and value creation possibilities are undoubted important.

Once the empirical results obtained demonstrated how a university can mature its entrepreneurial activities to reach the level of university innovation and entrepreneurship ecosystem in few times it is believed that this paper may serve as inspiration for other Brazilian universities that are looking for taking this path and that could take the case described as a model in some way.

As limitations of this work, it is presented the fact that the research strategy was based on a single case study that does not allow its conclusions to be generalized to other cases or other university institutions. To overcome this limitation, it is suggested that future studies use multiple cases to allow analytical generalizations and comparisons with other cases. Another suggestion is a study including the differences between ecosystems formed by public and private universities aiming to find the more favorable and the more challenging aspects they faced in creation and development.

# **7** References

- Abreu, M. and Grinevich, V. (2013) 'The nature of academic entrepreneurship in the UK: Widening the focus on entrepreneurial activities', Research Policy, 42 (2), pp. 408-422.
- Abou-Warda, S. H. (2016) 'New educational services development: Framework for technology entrepreneurship education at Universities in Egypt', International Journal of Educational Management, 30(5), pp. 698–717. doi: 10.1108/IJEM-11-2014-0142.
- Alves, A.C., Fischer, B., Schaeffer, P.R. and Queiroz, S. (2019), 'Determinants of student entrepreneurship: An assessment on higher education institutions in Brazil', Innovation & Management Review, 16 (2), pp. 96-117. doi: 10.1108/INMR-02-2018-0002
- Audretsch, D., Lehmann, E. and Wright, M. (2014) 'Technology transfer in a global economy', The Journal of Technology Transfer, 39 (3).
- Auspin Agência USP de Inovação. (2021). 'Propriedade intelectual'. available at: http://www.inovacao.usp.br/propriedadeintelctual/. (accessed 20 march 2021).
- Azevedo, I. S. C., Gaspar, J. V and Teixeira, C. S. (2016) 'Análise Característica das incubadoras de base tecnológica', Revista Eletrônica do Alto Vale do Itajaí REAVI, 5 (8), pp. 01-13.
- Baldini, N., Fini, R. and Grimaldi, R. (2015) 'An Assessment of Academic Entrepreneurship in Italy'. In: Link, A. N., Siegel, D. S. and Wright, M (Ed.). The Chicago Handbook of University Technology Transfer and Academic Entrepreneurship. The University of Chicago Press, Chicago.
- Barros, J. G. and Paixão, A. E. A. (2021) 'Entrepreneurial Analysis of Three Innovation Ecosystems in Northeast Brazil', Revista Gestão Inovação e Tecnologias, 11(1), pp. 5747–5759. doi: 10.7198/geintec.v11i1.1477.
- Bardin, L. (2011) Análise de conteúdo. Edições, São Paulo.
- Bauer, M. W.and Gaskell, G.(2002). Pesquisa qualitativa com texto, imagem e som: um manual prático. Petrópolis: Vozes.
- Bengtsson, L. (2017) 'A comparison of university technology transfer offices' commercialization strategies in the Scandinavian countries', Science and Public Policy, 44 (4), pp. 565-577.
- Berggren, E. (2017) 'Researchers as enablers of commercialization at an entrepreneurial university', Journal of Management Development. Emerald Publishing Limited, 36(2), pp. 217–232. doi: 10.1108/JMD-06-2016-0117.
- Cai, Y., Mhara, J. and Chen, Q. (2020) 'Higher education in innovation ecosystems', Sustainability (Switzerland), 12(11), pp. 1–12. doi: 10.3390/su12114376.
- Carvalho, L., Costa, T., and Dominguinhos, P. (2010) Creating an entrepreneurship ecosystem in higher education. Edited by S. Soomro. InTech. Available at: www.intechopen.com (Accessed: 16 August 2018).

- Chais, C., Ganzer, P. P. and Olea, P. M. (2018) "Technology transfer between universities and companies: Two cases of Brazilian universities", Innovation & Management Review, 15(1), pp. 20-40. doi: https://doi.org/10.1108/INMR-02-2018-002
- Christensen, C. M. and Rosenbloom, R. (1995) 'Explaining the attacker's advantage: Technological paradigms, organizational dynamics, and the value network.', Research Policy, 24(2), pp. 233–257.
- Cunningham, J. A., Menter, M. and Young, C. (2017) 'A review of qualitative case methods trends and themes used in technology transfer research', The Journal of Technology Transfer, 42 (4), pp. 923-956.
- Dias, A. A. and Porto, G. S. (2014) 'Como a USP transfere tecnologia?', Organizações & Sociedade, 21(70), pp. 489–508.
- Eisenhardt, K. M. (1989) 'Building Theories from Case Study Research', Academic Management Review, 14 (4), pp. 532–550.
- Engelman, R. and Fracasso, E. M. (2013) 'Contribuição das incubadoras tecnológicas na internacionalização das empresas incubadas'. Revista de Administração, 48 (1), pp. 165-178.
- Eveleens, C. P., van Rijnsoever, F. J. and Niesten, E. M. M. I. (2017) 'How network-based incubation helps start-up performance: a systematic review against the background of management theories', The Journal of Technology Transfer, 42(3), pp. 676–713. doi: 10.1007/s10961-016-9510-7.
- Etzkowitz, H. and Leydesdorff, L. (2000) 'The dynamics of innovation: From National Systems and "mode 2" to a Triple Helix of university-industry-government relations'. Research Policy, 29 (2), pp. 109–123. doi: 10.1016/S0048-7333(99)00055-4.
- Etzkowitz, H. and Zhou, C. (2017) 'Hélice Tríplice: Inovação e empreendedorismo universidadeindústria-governo'; Estudos Avançados, 31 (90), pp. 23–48. doi:10.1590/s0103-40142017.3190003.
- Fayolle, A. (2010) Handbook of Reseach in Entrepreneurship Education volume 3. Edward Elgar.
- Fini, Riccardo et al. (2017) 'Institutional determinants of university spin-off quantity and quality: a longitudinal, multilevel, cross-country study', Small Business Economics, 48 (2), pp. 361– 391.
- Fujino, A. and Stal, E. (2007) 'Gestão da propriedade intelectual na universidade pública brasileira: diretrizes para licenciamento e comercialização', Revista de Negócios, 12 (1), pp. 104-120, 2007.
- Fuller, D. and Pickernell, D. (2018) 'Identifying groups of entrepreneurial activities at universities', International Journal of Entrepreneurial Behaviour & Research, 24 (1), pp. 171-190.
- Galán-Muros, V. et al. (2017) 'Nurture over nature: How do European universities support their collaboration with business?', The Journal of Technology Transfer, 42, pp. 184–205.
- Gimenez, A. M. N. and Bambini, M. D. M. B. M. (2016) 'Universidades No Sistema de Inovação Brasileiro: A Experiência da UNICAMP na Promoção de Uma Cultura Da Propriedade Intelectual, empreendedorismo e inovação', Cad. Prospec., 9 (1), pp. 18–29.
- Godoi, C. K., Bandeira-De-Mello, R. and Silva, A. B. (2006) Pesquisa Qualitativa em Estudos Organizacionais. Saraiva, São Paulo.
- Gonçalves, A. A. and Tomaél, M. I. (2015) 'Diretrizes para proteção do conhecimento: um estudo de caso em uma universidade do Estado do Paraná', AtoZ: novas práticas em informação e conhecimento, 4(1), p. 34. doi: 10.5380/atoz.v4i1.41882.
- Grimaldi, R. et al. (2011) '30 years after Bayh–Dole: Reassessing academic entrepreneurship'. Research Policy, 40 (8), pp. 1045-105.
- Grimm, H. and Jaenicke, J. (2014) 'Testing the causal relationship between academic patenting and scientific publishing in Germany: Crowding-out or reinforcement?', The Journal of Technology Transfer, 40 (3).

- Guerrero, M. et al. (2014) 'Entrepreneurial universities in two European regions: a case study comparison.', The Journal of Technology Transfer, 39(3), pp. 415–434. doi: 10.1007/s10961-012-9287-2.
- Guerrero, M., Urbano, D. and Gajón, E. (2020) 'Entrepreneurial university ecosystems and graduates' career patterns: do entrepreneurship education programs and university business incubators matter?', Journal of Management Development, 39(5), pp. 753–775. doi: 10.1108/JMD-10-2019-0439.
- Hasan, S. M., Khan, E. A. and Nabi, N. U. (2017) 'Entrepreneurial education at university level and entrepreneurship development', Education and Training, 59(7–8), pp. 888–906. doi: 10.1108/ET-01-2016-0020.
- Hashimoto, M. and Fonseca Jr, R. S. (2019). 'A Importância do Ensino Empreendedor na Formação do Nível Técnico'. Revista de Negócios, 23 (3), pp. 7-18. doi: 10.7867/1980-4431.2018v23n3p7-18.
- Hayter, C. S. (2016) 'A trajectory of early-stage spinoff success: the role of knowledge intermediaries within an entrepreneurial university ecosystem', Small Business Economics, 47(3), pp. 633–656. doi: 10.1007/s11187-016-9756-3.
- Hayter, C. S. and Cahoy, D. R. (2016) 'Toward a strategic view of higher education social responsibilities: A dynamic capabilities approach', Strategic Organization, 16(1), pp. 12–34. doi: 10.1177/1476127016680564.
- Heblich, S. and Slavtchev, V. (2014) 'Parent universities and the location of academic startups', Small Business Economics, 42(1), pp. 1–15. doi: 10.1007/s11187-013-9470-3.
- Hotmilk. (2021). available at: http://hotmilk.pucpr.br/. (acessed 20 march 2021).
- Kakouris, A. and Georgiadis, P. (2016) 'Analysing entrepreneurship education: a bibliometric survey pattern', Journal of Global Entrepreneurship Research, 6(1). doi: 10.1186/s40497-016-0046y.
- Kaniak, V. M. M. (2020) Universidades empreendedoras à luz da teoria das capacidades dinâmicas: um estudo multicasos no estado do Paraná. Universidade Federal do Paraná.
- Koslosky, M. A. N., de Moura Speroni, R. and Gauthier, O. (2015) 'Ecossistemas de inovação Uma revisão sistemática da literatura', Espacios, 36(3), pp. 1–16.
- Levie, J. (2014) 'The university is the classroom: teaching and learning technology commercialization at a technological university', The Journal of Technology Transfer, 39 (5), pp. 793–808, 2014. doi: 10.1007/s10961-014-9342-2.
- Link, A. N., and Sarala, R. M. (2019) 'Advancing conceptualization of university entrepreneurial ecosystems: The role of knowledge-intensive entrepreneurial firms', International Small Business Journal, 37(3), pp. 289–310. doi: 10.1177/0266242618821720.
- Merriam, S. B. (2009) Qualitative research: a guide to design and implementation. Jossey-Bass, San Francisco.
- Miller, D. J. and Acs, Z. J. (2017) 'The campus as an entrepreneurial ecosystem: the University of Chicago', Small Business Economics, 49(1), pp. 75–95. doi: 10.1007/s11187-017-9868-4.
- Miranda, F. J, Chamorro, A. and Rubio, S. (2018) 'Re-thinking university spin-off: a critical literature review and a research agenda', The Journal of Technology Transfer, 43 (4), pp. 1007–1038. doi: 10.1007/s10961-017-9647-.
- Moore, J. F. (1993) 'Predators and prey: A new ecology of competition.', Harvard Business Review, 71(3), pp. 75–86.
- Moraes, G. H. S. et al. (2020) 'University Ecosystems and the Commitment of Faculty Members to Support Entrepreneurial Activity', BAR Brazilian Administration Review, 17(2), pp. 1–26. doi: 10.1590/1807-7692bar2020190013.
- Morris, M. H., Shirokova, G. and Tsukanova, T. (2017) 'Student entrepreneurship and the university ecosystem: a multi-country empirical exploration', European J. International Management, 11(1), pp. 65–85. doi: 10.1504/EJIM.2017.10001679.

- Neves, M. and Franco, M. (2019) 'Academic spin-off creation: Barriers and how to overcome them', R&D Management, 48(5), pp. 505–518.
- Noronha, N. S. et al. (2014) 'Estratégias de incubação para minimizar as incertezas da ação empreendedora', Revista Pensamento Contemporâneo em Administração, 8 (3), pp. 86, 2014.
- O'Kane, C. Cunningham, J. A., Menter, M. and Walton, S. (2020) 'The brokering role of technology transfer offices within entrepreneurial ecosystems: an investigation of macro-meso-micro factors', Journal of Technology Transfer. Springer. doi: 10.1007/s10961-020-09829-y.
- Padilla-Meléndez, A. et al. (2020) 'Entrepreneurial Universities and Sustainable Development', The Network Bricolage Process of Academic Entrepreneurs, 12 (4).
- Paiva, L. E. B. et al. (2019) 'Sustainability, Innovation, And Entrepreneurship: A Research With Administration and Secretariat Students'. Revista de Negócios, 24(3), pp. 7-26, doi: 10.7867/1980-4431.2019v24n3p7-26.
- Paranhos, J., Cataldo, B. and Pinto, A. C. A. (2018) 'Criação, institucionalização e funcionamento dos núcleos de inovação tecnológica no brasil: características e desafios', Revista Eletrônica de Administração, 24(2), pp. 253–280.
- Pattnaik, P. N. and Pandey, S. C. (2016) 'Revisiting University Spinoffs: Conceptual Advancements and Theoretical Underpinnings', International Journal of Innovation and Technology Management, 13 (1).
- Pereira, J. M. (2011) Política de ciência, tecnologia e inovação: uma avaliação da gestão do sistema de proteção à propriedade intelectual no Brasil. Independent Journal of Management & Production, 2 (2), pp. 426–430.
- Perkmann, M and West, J. (2015) 'Open science and open innovation: sourcing knowledge from universities'. In: Link, A. N.; Siegel, D. S. and Wright, M. The Chicago Handbook of University Technology Transfer and Academic Entrepreneurship. The University of Chicago Press, Chicago.
- Pertuzé, J. et al. (2010). Best Practices for Industry-University Collaboration. MIT Sloan Management Review, 51 (4), pp. 83-9.
- Powell, W., Packalen, K. and Whittington, K. (1999) 'Organizational and institutional genesis: The emergence of high- tech clusters in the life sciences, in J. Padgett& W. Powell (ed.) The Emergence of Organizations and Markets. Princeton: Princeton University Press, pp. 434– 465.
- PUCPR. (2021). available at: https://www.pucpr.br. (acessed 20 march 2021).
- Pugh, R., Soetanto, D., Jack, S.L. et al (2021). 'Developing local entrepreneurial ecosystems through integrated learning initiatives: the Lancaster case'. Small Bus Econ 56, pp. 833–847. doi.:10.1007/s11187-019-00271-5
- Raupp, F. M. and Beuren, I. M. (2003). Metodologia da pesquisa aplicável às ciências sociais. In: Beuren, M. (Ed.). Como elaborar trabalhos monográficos em contabilidade: teoria e prática. São Paulo: Atlas.
- Santos, S. X. et al. (2020) 'O papel estratégico dos NITs na política de inovação das instituições de ensino superior do Rio Grande do Norte e da Paraíba', Revista Eletrônica Gestão & Sociedade, 14(38), pp. 3547–3576.
- Sartori, R., Spinosa, L. M. and Nogas, P. S. M. (2017) 'Práticas de gestão em um núcleo de inovação tecnológica: o caso da Universidade Estadual de Maringá', Sistemas & Gestão, 12(3), p. 377. doi: 10.20985/1980-5160.2017.v12n3.1193.
- Saxenian, A. (1994) Regional advantage. Edited by AnnaLee Saxenian. Boston: Harvard Business School Press.
- Singh, A. S., Kaniak, V. M. M. and Segatto, A. P. (2020) 'Desafios Enfrentados Pelos Núcleos De Inovação Tecnológica (NITS) no Sul do Brasil e suas Estratégias De Superação: Um Estudo Multicasos', REA - Revista Eletrônica de Administração, 19(1), pp. 165–187.

- Steiner, J. E., Cassim, M. B. and Robazzi, A. C. (2013) 'Parques Tecnológicos: Ambientes de Inovação', available at: http://www.iea.usp.br/publicacoes/textos/steinercassimrobazziparquestec.pd (accessed 20 march 2021).
- Suzuki, S. and Okamuro, H. (2017) 'Determinants of Academic Startups' Orientation toward International Business Expansion', Administrative Sciences, 7(1), p. 1. doi: 10.3390/admsci7010001.
- Volles, K., Parisotto, S. and Regina, I. (2017) 'Universidade Empreendedora e Transferência de Conhecimento e Tecnologia', REAd. Revista Eletrônica de Administração, 23(1), pp. 137– 155. doi: 10.1590/1413-2311.03716.61355.
- Wright, T. (2006) 'The Evolution of Sustainability Declarations in Higher Education', Higher Education and the Challenge of Sustainability, pp. 7–19. doi: 10.1007/0-306-48515-x\_2.
- Yi, G. and Uyarra, E. (2018) 'Process Mechanisms for Academic Entrepreneurial Ecosystems: Insights from a Case Study in China'. Science, Technology and Society, 23 (1), pp. 85–106. doi: 10.1177/0971721817744446.
- Yin, R. K. (2009) Case Study Research: Design and Methods. Sage, California.

# REVISTA DE NEGÓCIOS Inovação e Estratégia em Organizações

# DIVIDENDOS E CRISES: EFEITOS NAS EMPRESAS SUSTENTÁVEIS E DEMAIS COMPANHIAS DA B3

# Murilo Alves Santos, Me.

Mestre em Administração Universidade Federal de Uberlândia E-mail: <u>mualvesan@yahoo.com.br</u>

# Edson Alves Ferreira, Me.

Mestre em Administração Universidade Federal de Uberlândia E-mail: <u>edson@faaftech.com</u>

# Miguel Hernandes Júnior, Me.

Mestre em Administração Universidade Federal de Uberlândia E-mail: <u>miguelhj2005@hotmail.com</u>

# Arthur Antonio Silva Rosa, D.r.

Doutor em Administração Universidade Federal de Uberlândia E-mail: <u>arthurasr@hotmail.com</u>

# Karem Cristina de Souza Ribeiro, Me.

Mestre em Administração Universidade Federal de Uberlândia E-mail: <u>kribeiro@ufu.br</u>





Received 03.06.2021 - Reviewed 20.12.2022 - Accepted 07.08.2023 ISSN 1980 -4431 Double blind review



# DIVIDENDOS E CRISES: EFEITOS NAS EMPRESAS SUSTENTÁVEIS E DEMAIS COMPANHIAS DA B3

# Resumo

O objetivo do presente estudo foi identificar e analisar a distribuição dos dividendos das empresas listadas na B3 ao longo do período de 2010 a 2020 comparando as distribuições de dividendos das empresas certificadas no ISE com as não certificadas ao longo do período, especialmente nas crises econômicas. Amostra do artigo conta com 665 empresas listadas na B3, com uma média de 28 empresas ano com certificação ISE. O método utilizado foi regressão de dados em painel com efeitos fixos e em seguida pooled tobit. Como resultados não pode ser comprovada a relação entre certificação ISE em crises econômicas com a menor distribuição de dividendos, no entanto, demonstrou-se que empresas com certificação ISE são sinalizadoras ao mercado de estabilização na distribuição de dividendos (independente de crise financeira ou não). A limitação do estudo se refere ao período inicial restrito a 2010 em virtude da implantação do IFRS e como pesquisas futuras sugere-se a análise ser realizada como períodos dilatados a fim de se confirmar os resultados obtidos. A originalidade e as implicações na literatura, faz referência ao papel da certificação ISE na distribuição de dividendos, pois foi demonstrado que nem mesmo em épocas de severas crises financeiras estas organizações reduzem ou cortam os dividendos.

Palavras-chave: Dividendos, Crise, Empresas Sustentáveis.

# 1 Introdução

pandemia ocasionada pelo vírus SARS-COV-2 desencadeou a maior crise e colapso nos sistemas de saúde ao redor do mundo desde a gripe espanhola de 1918. Em conjunto com a pandemia do coronavírus, grave crise financeira se alastrou pelos mercados ao redor do globo, o que gerou fortes consequências tanto econômicas quanto sociais (Melo & Cabral, 2020).

A crise financeira impactou e continua a impactar tanto os mercados de países desenvolvidos quanto dos em desenvolvimento. Em virtude da necessidade de se reduzir as taxas de contágio e de salvar vidas, foram implantadas medidas de restrição ao contato e à circulação de pessoas por meio de rígidas quarentenas e a limitação do funcionamento apenas de comércios e negócios ligados diretamente a produtos essenciais (Sjödin, Wilder-Smith, Osman, Farooq & Rocklöv, 2020).

No Brasil o PIB (Produto Interno Bruto) registrou, em 2020, -4,1%, o pior desempenho registrado em 25 anos (Instituto Brasileiro de Geografia e Estatística [IBGE], 2021a). A taxa de desemprego chegou aos impressionantes 13,5% em 2020, o que representa um aumento no indicador de 3,0 p.p frente ao mesmo trimestre de 2019 (IBGE, 2021c).

Mediante este cenário, as empresas observaram reduções drásticas nas suas vendas e consequentemente nas receitas e lucros. Com o intuito emergencial de preservação de caixa, as organizações dispensaram e licenciaram funcionários, além da redução ou suspensão por completo da distribuição de dividendos (Krieger, Mauck, & Pruitt, 2020).

Apesar de ser compreensível a necessidade de reduzir os dividendos, a sua efetiva realização pode sinalizar ao mercado e aos investidores que a situação financeira da empresa não possui boa perspectiva no curto, médio e longo prazo, por isso os gestores possuem resistência em sua implementação (Miller & Rock, 1985).

Além disso, os dividendos possuem papel primordial ao serem distribuídos para os acionistas das organizações, pois retira recursos dos gestores que poderiam realizar investimentos ruins ou fazer mal uso deles, o que acarretaria queda na eficiência e lucratividade futura das empresas (Jensen, 1986).

Durante a crise de 2008 e 2009 foi constatada a redução na distribuição de dividendos nas empresas financeiras (especificamente nos bancos) e estabilidade na distribuição dos dividendos realizados pelas organizações não financeiras (Floyd, Li & Skinner, 2015).

Estudo mais recente, de autoria de Krieger et al. (2020) referente aos impactos da crise econômica e a distribuição de dividendos nas empresas norte-americanas demonstra que a grave crise financeira deflagrada em 2020 pelo coronavírus levou as empresas não financeiras, a reduzirem ou até a cortarem a distribuição de dividendos a níveis maiores do que os observados pelas empresas

financeiras durante a crise de 2008, com o objetivo de obterem reservas de caixa e equilíbrio financeiro, mesmo com os fatores negativos de sinalização para o mercado e a possibilidade de conflitos de agência.

A bolsa de valores brasileira BM&F Bovespa (B3) criou no ano de 2005 o Índice de Sustentabilidade Empresarial (ISE) com intuito de certificar as empresas que possuem compromisso com o desenvolvimento sustentável, governança corporativa, transparência, entre outros; que acabam por diferenciá-las em termos de qualidade das demais empresas listadas na B3, mas que não possuem a certificação. Atualmente, das mais de 300 organizações listadas na bolsa, somente 39 possuem a certificação ISE. O valor de mercado destas empresas somadas equivale a 38% do total das companhias na B3 e, além disso, o índice ISE obteve uma valorização de +294,73% entre a data de sua criação e 25/11/2020, contra +245,06% do Ibovespa no mesmo período (Brasil, Bolsa, Balcão [B3], 2020).

A certificação no ISE, de acordo com os resultados do trabalho dos autores Cezarino, de Queiroz Murad e Resende (2020), pode influenciar positivamente as escolhas no curto prazo em épocas de adversidades econômicas, o que corrobora para moldar o futuro das empresas na busca pelo crescimento no valor da organização a longo prazo.

Além disso, o estudo dos autores Matos, Barros e Sarmento (2020) demonstrou que empresas europeias que possuíam maiores indicadores de sustentabilidade estavam atreladas a maior estabilidade nos ganhos de dividendos por parte dos acionistas ao comparar às demais empresas que não possuíam o indicador.

No Brasil, onde além da figura dos dividendos há também a presença dos juros sobre capital próprio como forma alternativa para a distribuição de lucros (Futema, Basso & Kayo, 2009), os estudos que relacionam dividendos e as práticas sustentáveis nas organizações, principalmente atreladas à cerificação ISE da B3, são ainda muito incipientes. Desta maneira, ao considerar a literatura de distribuição de dividendos em épocas de crises econômicas que prevê reduções ou até os cortes nos ganhos dos acionistas, e de outro lado as empresas com a certificação de sustentabilidade listadas no ISE, com maior qualidade, transparência da gestão e estabilidade nos dividendos, tem-se o seguinte questionamento que norteará o presente estudo:

Em épocas de crise, as empresas inscritas no ISE têm a distribuição de seus dividendos alterada – realizando reduções ou cortes – em proporção superior às demais empresas listadas na B3 em épocas de crise?

Mediante ao problema exposto, o objetivo desta pesquisa é identificar e analisar a distribuição dos dividendos das empresas listadas na B3 ao longo do período de 2010 a 2020 comparando as distribuições de dividendos das empresas certificadas no ISE com as não certificadas ao longo do período, especialmente nas crises econômicas.

### 2 Fundamentação Teórica

Nesta seção serão abordados os aspectos teóricos voltados para o contexto de dividendos, crise e sustentabilidade afim de permitir a contextualização, a correta avaliação e o devido embasamento a respeito da distribuição de dividendos por parte das empresas pertencentes ao ISE nos momentos de crise como ocorrido em 2020.

# 2.1 Dividendos

temática de dividendos está amplamente difundida na teoria de finanças. Nos estudos seminais de Lintner (1956) e Gordon (1959) esta prática foi definida como a forma e o montante de lucros distribuídos ou retidos, analisados ante à sua importância no retorno aos acionistas.

Dentre os vários aspectos que permeiam a ampla discussão teórica acerca da política de distribuição de dividendos nas organizações, sua relação com as políticas de investimento e os conflitos de agência são aspectos destacáveis em meio ao cenário da pesquisa.

# DIVIDENDOS E CRISES: EFEITOS NAS EMPRESAS SUSTENTÁVEIS E DEMAIS COMPANHIAS DA B3

A decisão de distribuir ou não dividendos afeta a política de financiamento das empresas (Loss & Sarlo Neto, 2003) e se configura, além disso, como uma questão corporativa importante e relacionada às demais decisões financeiras tomadas pela empresa, inclusive de investimento (Abor & Bokpin, 2010). Ainda que indiretamente, o pagamento de dividendos influencia a capacidade de reinvestimento das organizações e, consequentemente, a sua estrutura de capital (Leite, Pamplona, da Silva, Brandt & de Oliveira Schlotefeldt, 2020).

Autores como Loss e Sarlo Neto (2003) mencionam a relevância do tema, discutido há décadas, e pautado na maximização do retorno dos acionistas e na possível relação com a política de investimento nas empresas. Para os autores, a decisão de pagar dividendos implica na análise de quanto ficará retido na organização e, consequentemente, quanto de investimentos poderá ser financiado, visando o crescimento da empresa e, futuramente, a possibilidade de retornos ainda maiores aos acionistas.

Em consonância, Higgins (1972) elucida que as finalidades de investimento e financiamento de dívida são fatores que podem influenciar o pagamento de dividendos aos acionistas. Mesmo que se desconsidere a perfeição teórica dos mercados, não se pode desprezar a relação entre política de distribuição de dividendos e as decisões de investimento nas empresas (Fama, 1974).

A opção por pagar dividendos aos acionistas impacta diretamente no ritmo de crescimento da empresa, na medida em que direciona a execução dos investimentos à necessidade de captação de novos recursos que, via de regra, são de longo prazo, escassos, de difícil obtenção e com alto custo de captação (Gordon, 1959). Destaca-se, aqui, portanto, o trade-off entre aumentar a distribuição de dividendos, sinalizando um retorno imediato aos acionistas, mas, em contrapartida, minimizar o retorno para os mesmos, dada a menor clareza quanto aos futuros ganhos de capital na organização (Gordon, 1959; Lintner, 1956).

O segundo aspecto que deve ser considerado na análise da teoria que pauta as reflexões sobre distribuição de dividendos diz respeito aos conflitos de agência intrínsecos a ela.

Dada a não existência de mercados perfeitos como os que foram adotados como premissa por Miller e Modigliani (1961), passou-se a estudar, na teoria de dividendos, os efeitos que as imperfeições existentes no mercado podem gerar na distribuição de dividendos. Dentre tais imperfeições, citam-se os custos de agência (Forti, Peixoto, & Alves, 2015).

A relação de agência é definida por Jensen e Meckling (1976) como um contrato no qual uma pessoa – o agente – torna-se empregado de outrem – o principal – ou recebe dele delegação de poder para executar determinado serviço. Os conflitos que emanam dessa relação advêm da busca de ambos, agente e principal, pela maximização e, além disso pelo oportunismo das partes, levando com que o agente possa desconsiderar os interesses do principal em determinadas ocasiões.

Nas organizações, a relação entre acionistas e administradores pode ser considerada uma relação de agência, visto estes terem sido contratados por aqueles para lhes representar ante às decisões à frente da empresa. Dada a natureza desta relação, eventualmente os gestores optando por ações que visem o seu interesse ou a maximização dos resultados para si, temos constituídos então os conflitos de agência (Watts & Zimmerman, 1979).

A literatura expõe de maneira prática como estes conflitos podem acontecer na relação entre gestores e acionistas. Decisões voltadas para investimentos, financiamentos e sobre a política de dividendos da empresa, quando desalinhada aos interesses das partes, são ocasionadoras deste conflito. A não distribuição de dividendos, por exemplo, resulta no excesso de recursos disponíveis para a organização – fluxo de caixa livre – e a alocação destes recursos no consumo próprio (gratificações e benefícios) ou em investimentos e projetos duvidosos podem destruir o valor da empresa sendo, portanto, contrário aos interesses dos acionistas e configurados como conflitos de agência (Easterbrook, 1984; Jensen, 1986; Jensen & Meckling, 1976).

O pagamento de dividendos pode atuar como um mitigante dos conflitos de agência na medida em que, por si só, resulta em menor proporção de lucros retidos e, consequentemente menores recursos disponíveis nas mãos dos administradores, o que reduz, portanto, as oportunidades de desperdício ou má aplicação dos recursos da organização (Bartram, Brown, & Stulz, 2012; Easterbrook, 1984; Jensen & Meckling, 1976; Lang & Litzenberger, 1989). Os autores Fama e French (2001) analisaram os determinantes dos dividendos numa amostra de empresas não financeiras listadas na Bolsa de Valores norte-americana durante o período de 1926 a 1999 e, em suas conclusões, destacaram três determinantes fundamentais na distribuição de dividendos: rentabilidade, crescimento e tamanho das empresas.

Ao analisar os determinantes dos dividendos em 300 empresas brasileiras não financeiras durante o período de 1995 a 2011, os autores Forti, Peixoto e Alves (2015) identificaram como positivas e significativas para a distribuição de dividendos as variáveis tamanho, ROA (retorno dos ativos), market to book, liquidez e crescimento dos lucros. Como variável dependente os autores utilizaram dividendos divididos pelo ativo total, e como método de cálculo utilizaram o Tobit e o GMM (Método de Momentos Generalizados).

Em consonância com os determinantes dos dividendos, os autores (Rodrigues et al., 2019) analisaram os efeitos da flexibilidade financeira atrelada à distribuição de dividendos em 614 empresas brasileiras no período de 2011 a 2016. Em seus achados os autores constataram que empresas com capacidade de endividamento estão positivamente relacionados com maior volume de dividendos, adicionalmente, constataram que empresas maiores, lucratividades superiores e melhores oportunidades de crescimento influenciam positivamente na maior distribuição de dividendos.

Estudo mais recente dos autores Forti e Freitas (2020) analisaram a relação de dividendos com a classificação do rating das 330 empresas brasileiras cadastradas na B3 no período de 1995 a 2017. Em seus achados constataram que empresas com maiores ratings pagam menores dividendos, o que indica que as organizações utilizam o rating como informação de sinalização adicional ao mercado e em virtude disso, realizam menores dividendos. Adicionalmente, os autores confirmaram as variáveis tamanho, crescimento dos lucros, ROA e alavancagem como positivos para maiores distribuições de dividendos. Como variável dependente os autores utilizaram dividendos divididos pelo patrimônio líquido e utilizaram como método de análise Tobit, GMM e Pooled – Ols.

Há de se considerar ainda no cenário nacional, a particularidade dos juros sobre capital próprio. De acordo com Futema, Basso & Kayo (2009), este mecanismo é análogo aos dividendos, porém com a particularidade de serem dedutíveis do imposto de renda e contribuição social.

No âmbito da convivência e diferenciação entre dividendos e juros sobre capital próprio temse aspetos que envolvem desde a natureza jurídica; o fundamento da remuneração; sua obrigatoriedade e, principalmente, a forma de tributação aplicada a cada uma dessas formas de remuneração de acionistas. Ao passo que os dividendos têm origem no lucro líquido e não se recolhe imposto de renda sobre eles, a figura dos juros sobre capital próprio é agrupada no resultado da empresa como despesa financeira e, portanto, se tornam dedutível na base tributável visto, portanto, como um benefício fiscal para as pessoas jurídicas (Gomes, Takamatsu & Machado, 2015).

### 2.2 Crise Econômica

s crises econômicas são ciclos de recessão presentes no ambiente nos quais as empresas operam (Leite et al., 2020), que surgem de forma inesperada, sem período certo de duração, configurando-se um evento com grande potencial transformador nas organizações (Latham & Braun, 2011), à medida que lhes confere a oportunidade de avaliar alternativas para melhor gerir capital de giro, custo de capital e fluxos de caixa (Kambil, 2008).

Por outro lado, associadas às ocorrências de crise, estão a escassez de recursos financeiros impactados em seu custo ou mesmo o prazo de captação (de Freitas, 2009); o impacto nas vendas, na política de preços e nas decisões de investimento, o que agrega maior complexidade à tomada de decisões do ponto de vista estratégico (Fabregá & Nicolau, 2016).

Ante a tais efeitos, as crises econômicas não podem ser negligenciadas nas análises corporativas, pois estes eventos trazem implicações diretas no desempenho das empresas e, consequentemente, na distribuição de dividendos (Leite et al., 2020). A ocorrência de episódios de crise afeta a política de dividendos das organizações e fornece, portanto, oportunidade para identificar a sua reação ao choque econômico gerado (Lim, 2016).

# DIVIDENDOS E CRISES: EFEITOS NAS EMPRESAS SUSTENTÁVEIS E DEMAIS COMPANHIAS DA B3

O impacto das crises na política de dividendos é gerado face à sinalização das empresas aos seus investidores do risco de perdas econômicas futuras que, se traduzidas antecipadamente aos resultados da empresa, sinalizam redução nos dividendos distribuídos (Sampaio, Coelho & Holanda, 2015), mas também pelo processo da redução na alavancagem financeira enfrentada pelas empresas nestes contextos, culminando na redução do pagamento de dividendos (Lim, 2016).

A crise financeira de 2008 a 2009 que afetou grande parte dos países ao redor do mundo, evidenciou a necessidade de redução e até corte na distribuição de dividendos a ser realizada por empresas norte-americanas financeiras (principalmente bancos), o que não foi evidenciado em empresas não financeiras. Estes achados demonstraram que os cortes foram necessários em virtude da preservação do capital dos bancos, principalmente dos maiores que são regulados (Floyd et al., 2015).

O ano de 2020 foi catastrófico para a economia mundial, pois as projeções de fechamento do resultado do PIB mundial apontam cerca de 3% de contração em virtude dos efeitos da pandemia do coronavírus (Fundo Monetário Internacional [IMF],2020). No Brasil, o PIB teve perda de -4,1%, maior recuo em 25 anos da história do país, o que demonstrou maior fragilidade à crise desencadeada pelo coronavírus ante a média mundial (IBGE, 2021a).

Os autores Krieger et al. (2020), analisaram a distribuição de dividendos neste período de grandes incertezas em cerca de 1.400 ações que pagam dividendos das bases COMPUSTAT e CRSP (Centro de Pesquisa de Segurança e Preços) em empresas listadas na bolsa norte-americana no período compreendido do primeiro quadrimestre de 2015 ao segundo quadrimestre de 2020. Em seus achados constaram que os cortes ou omissões nas distribuições de dividendos foram maiores nos quadrimestres de 2020 em virtude da crise do coronavírus do que os registrados desde 2015, o que permitiu as organizações fluxos de caixa adicional e flexibilidade financeira para responderem as incertezas da crise.

# 2.3 Sustentabilidade

e acordo com Cruz e Assis (2009), o Índice de Sustentabilidade Empresarial da B3 (ISE) é um dos mecanismos utilizados para mensurar o desempenho e ordenar empresas que tenham gestão sustentável e socialmente responsável. Tal índice tem como propósito refletir o retorno de uma carteira de ativos com reconhecido compromisso socioambiental, além de atuar como promotor dessas práticas no mercado nacional e, em menor escala, satisfazer as expectativas dos acionistas.

A responsabilidade social se caracteriza como um conjunto de ações que envolvem o relacionamento entre a sociedade, os negócios da empresa e seus stakeholders (Bhattacharyya, Sahay, Arora, & Chaturvedi, 2008; Heslin & Ochoa, 2008; Scott, 2007). A responsabilidade social extrapola as discussões epistemológicas ou metodológicas e avança para os desdobramentos em situações específicas nas organizações brasileiras (Cruz & Assis, 2009).

Considerando pilares como a sociedade e comunidade; a promoção da cidadania e da democracia; a redução das diferenças entre ricos e pobres; a observância às condições de trabalhos e aos direitos trabalhistas e; o comportamento ético (Cruz & Assis, 2009), a responsabilidade social se traduz na busca das organizações por uma postura ética nas perspectivas social e ambiental durante o curso de suas atividades (Scott, 2007).

Uma empresa socialmente responsável, deve contemplar a sociedade nas relações de ganho que propõe para si e buscar continuamente ações de sustentabilidade para si e para a sociedade. A adoção destas práticas confere às organizações melhora na reputação com desdobramentos na imagem da empresa o que pode ser considerado como uma vantagem competitiva (Cruz & Assis, 2009).

Estudo dos autores Matos et al. (2020) realizado nas empresas europeias cadastradas na Stoxx Europe 6001 no período de 2000 a 2019 demonstrou a relação positiva entre empresas sustentáveis de acordo com a classificação da Thomson Reuters ESG (meio ambiente, social e governança corporativa) e a distribuição de dividendos. Em seus achados, elucidaram que empresas com maiores

### DIVIDENDOS E CRISES: EFEITOS NAS EMPRESAS SUSTENTÁVEIS E DEMAIS COMPANHIAS DA B3

classificações no índice de sustentabilidade possuem maior estabilidade na distribuição de dividendos do que empresas que não realizam o investimento em práticas sustentáveis.

No entanto estudos realizados pelos autores Saeed e Zamir (2020) em 721 organizações listadas originariamente na Índia, China, Indonésia, Paquistão, Malásia, Coréia, Turquia e Rússia, demonstraram a relação negativa existente entre as empresas que se tornaram socialmente responsáveis com ampla divulgação de suas ações no mercado, relacionado com a distribuição de dividendos. De acordo com os autores a ampla divulgação de informações não financeiras atua como papel de governança, o que contribui para reduzir a assimetria de informações entre os gestores e os acionistas, e possibilita as empresas mais sustentáveis a acumular recursos por meio da redução nos dividendos para realizarem investimentos em oportunidades para crescimento dos negócios.

# 2.4 Empresas Sustentáveis e a Distribuição de Dividendos na Crise

s hipóteses formuladas e que serão alvos das tratativas propostas nesta pesquisa consideram, portanto, os principais pressupostos teóricos a respeito dos temas de dividendos, crise e sustentabilidade.

Na crise de 2008 – 2009 foi demonstrado que empresas norte-americanas não financeiras mesmo em grandes restrições de capital e aumento nos riscos, não tiveram alterações em seus dividendos neste período como houve nas empresas financeiras (Floyd et al., 2015).

Infere-se desta maneira que episódios de crise econômica acentuam o risco de investimentos, os quais, somados à escassez de recursos, resultam em uma maior insegurança por parte dos acionistas. Desta maneira há uma maior demanda na manutenção ou no aumento na distribuição dos dividendos para manter a reputação das empresas e de seus gestores, ao sinalizar que os recursos disponíveis estariam direcionados prioritariamente aos acionistas. Tem-se desta forma a hipótese H0.

H0: Dentre todas as empresas listadas na B3 as pertencentes ao índice ISE distribuem mais dividendos em épocas de crise.

Cenários de crise culminam na escassez de recursos financeiros disponíveis conforme de Freitas (2009) e; sobretudo dada a melhora que as práticas e classificações sustentáveis conferem às empresas ante aos seus acionistas (Cruz & Assis, 2009), infere-se que a melhor qualificação em termos de sustentabilidade certificada pelo ISE na B3, atue como um complemento de sinalização aos acionistas, e que por isso as empresas consigam pagar menores ou até omitir dividendos principalmente em épocas de crise. Tem-se desta forma a hipótese H1.

H1: Dentre todas as empresas listadas na B3 as pertencentes ao índice ISE reduzem ou até cortam dividendos em épocas de crise.

Esta hipótese considera que tal redução se verifica como forma de garantir a saúde financeira das organizações, especialmente no que tange a recursos financeiros disponíveis para o suprimento de suas necessidades. Embora a política de dividendos figure como um mitigador dos conflitos de agência (Bartram et al., 2012; Easterbrook, 1984; Jensen, 1986; Jensen & Meckling, 1976; Lang & Litzenberger, 1989), a sua distribuição em menor patamar, nestes episódios e no tipo de organização estudada não os potencializa, visto menor oferta de recursos no mercado, demanda maior de liquidez nas organizações e, principalmente, a boa reputação estabelecida na relação gestor-acionista.

# 3 Metodologia

presente estudo é realizado em 665 empresas listadas na B3 durante o período de 2010 a 2020. Inicia-se em 2010 em virtude da implantação do IFRS o que permite maior comparabilidade e estabilidade dos dados a serem analisados. Destas 665 empresas, em média 28 estão cadastradas na certificação ISE da B3 anualmente. As empresas financeiras em virtude de suas particularidades foram retiradas da amostra.

A base de dados utilizada foi obtida ao mesclar os dados da Economática® (informações contábeis e financeiras provenientes das empresas cadastradas na B3), da Comissão de Valores Mobiliários (CVM), B3 (dados de governança e indicador ISE) e do IBGE (PIB brasileiro).

Em seguida serão apresentadas as variáveis utilizadas no estudo que podem influenciar na distribuição de dividendos das empresas. As fórmulas e os cálculos que foram utilizados para a obtenção das variáveis, estão apresentados na Tabela 1.

A distribuição dos dividendos como variável dependente é representada pela proxy Dividendos (DIV), que de acordo com Forti & Freitas (2020), deve ser relativizada pelo patrimônio líquido e não pelos lucros, a fim de se capturar somente a variação dos dividendos e não a dos lucros. A escolha do patrimônio líquido para a relativização dos dividendos, se dá em virtude de comportamento mais estável dele ante aos lucros, que podem ser positivos ou negativos ao longo dos anos, podendo-se chegar a ter distribuição de dividendos mesmo a organização com lucratividade negativa.

Para tamanho (TAM), adotada como variável de controle e calculada a partir do logaritmo natural do ativo total da empresa, espera-se relação positiva com a distribuição de dividendos, pois maiores empresas, por serem mais maduras, não necessitam realizar grandes gastos com investimentos, ou em virtude de possuírem outras formas de financiamentos que não sejam provenientes da retenção de lucros, conseguem maior distribuição de dividendos (Forti & Freitas, 2020; Forti et al., 2015; Rodrigues et al., 2019).

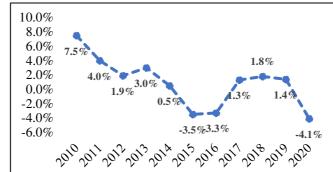
Para controlar rentabilidade, a variável incluída no modelo foi o ROA (retorno sobre ativos), mensurada pela razão entre lucro operacional e total de ativos. Espera-se, para ela, um comportamento positivo ante à distribuição de dividendos, sugerindo que empresas com maiores rentabilidades possuam maior capacidade e por isso distribuam maiores dividendos (Forti & Freitas, 2020; Forti et al., 2015).

Alavancagem (ALAV), calculada pela razão entre o passivo total e o patrimônio líquido, é tratada como proxy de endividamento e pode ter comportamento positivo ou negativo ante à distribuição de dividendos. Positivo como um efeito de sinalização no qual, maior alavancagem pressupõe maiores fluxos de caixas futuros, desta maneira a fim de confirmar esta hipótese os gestores devem pagar maiores dividendos para confirmar esta sinalização (Forti & Freitas, 2020; Martins & Famá, 2012). Negativo, pois empresas com maior endividamento possuem fluxos de caixas comprometidos com seus credores, o que reduziria a flexibilidade financeira e consequentemente menores possibilidades de dividendos (Forti et al., 2015; Ranajee, Pathak, & Saxena, 2018; Rodrigues et al., 2019; Rozeff, 1986).

Para crescimento dos lucros (CLUC), espera-se um comportamento positivo, pois maior crescimento na lucratividade das empresas possibilita a redução das incertezas dos gestores e por conseguinte maiores distribuição nos dividendos (Forti et al., 2015). Esta variável foi calculada pela razão entre a diferença de lucros no exercício corrente e no ano anterior e o total de lucros auferidos no ano anterior.

Sustentabilidade (DISE), é uma das variáveis foco do estudo, composta por uma dummy atribuída às empresas nos respectivos anos da série estudada em que elas estejam listadas no ISE. O comportamento com os dividendos pode ser negativo, em virtude da certificação ISE exercer papel complementar de sinalização ao mercado e aos acionistas das boas práticas da organização, bem como do compromisso com a transparência das ações da gestão, o que minimiza a assimetria de informação. Desta maneira as empresas que investem em sustentabilidade por meio da certificação poderiam contar com fluxos maiores de caixa e recursos para investirem em novos projetos (Saeed & Zamir, 2020). E também pode ocorrer uma relação positiva com os dividendos, pois de acordo com os autores Matos et al. (2020), empresas com certificação de sustentabilidade podem ser sinônimo para os investidores de estabilidade na distribuição dos dividendos em virtude de suas práticas de gestão.

Como variável de crise financeira, também foco neste estudo, é utilizada a dummy DCRISE, que assumiu valor 1 para anos no qual o PIB brasileiro assumiu valor negativo e 0 para valores do PIB positivos. Dentro do período estudado os anos que tiveram recessão no Brasil foram 2015 - 2016 e 2020, com os valores em percentuais do PIB em -3,5%, -3,3% e -4,1%, respectivamente. A Figura 1 elucida a evolução do PIB brasileiro de 2010 a 2020 (IBGE, 2021b).



### Figura 1. Evolução do PIB brasileiro 2010 - 2020.

Fonte: Adaptado de IBGE (2021b)

A variável DCRISE pode se comportar tanto positiva quanto negativamente ante à distribuição dos dividendos. A relação positiva foi evidenciada e descrita por Floyd et al. (2015), que identificaram que as empresas norte-americanas não financeiras apesar da crise de 2008-2009 mantiveram seus dividendos estáveis para sinalizar solidez financeira aos seus acionistas. No entanto, o mesmo não se confirmou no estudo de Krieger et al. (2020) que demonstrou que as empresas norte-americanas não financeiras, frente às incertezas da pandemia do coronavírus no ano de 2020, decidiram por reduzir ou até cortar dividendos afim de obterem caixa para se resguardarem frente aos desafios impostos.

A variável participação no novo mercado (DNM) é variável de controle do tipo dummy que assume valor 1 para empresas cadastradas no Novo Mercado da B3 e valor de 0 para empresas que não estão cadastradas. Espera-se que o sinal seja negativo, pois a adesão a níveis mais altos de governança corporativa sugere que as emissões das ações sejam somente ordinárias e, portanto, com maior transparência e exigência de um número mínimo de ações destinadas à livre negociação, o que resulta na possibilidade de menores pagamentos de dividendos do que das demais empresas (Allan & Coelho, 2012; Fonteles, Júnior, de Vasconcelos, & De Luca, 2012).

	ariaveis da pesquisa			[
Variáveis	Descrição	Expressão	Relação Esperada	Autores
DIV	Dividendos distribuídos aos acionistas	Soma dos dividendos e juros sobre capital próprio / Patri- mônio Líquido	Variável Depen-dente	(Forti & Freitas, 2020)
TAM	Tamanho das empresas	Logaritmo natural do Ativo Total da empresa	(+)	(Forti & Freitas, 2020; Forti et al., 2015; Rodrigues et al., 2019)
ROA	Retorno do Ativo	Lucro Operacional / Ativo Total	(+)	(Forti & Freitas, 2020; Forti et al., 2015)
ALAV	Alavanca-gem	Passivo Total / Patrimônio Líquido	(+/-)	(Forti & Freitas, 2020; Forti et al., 2015)
CLUC	Crescimen-to dos Lucros	(Lucro atual – Lucro ano anterior dividido) / lucro ano anterior	(+)	(Forti & Freitas, 2020)
DISE	<i>Dummy</i> de sustentabi- lidade	1 para empresas listadas no ISE da B3 e 0 para as não listadas	(+/-)	(Matos et al., 2020; Saeed & Zamir, 2020)
DCRISE	<i>Dummy</i> para crise financeira	1 para anos com crise financeira e 0 para anos sem crise	(+/-)	(Floyd et al., 2015; Krieger et al., 2020)
DNM	Dummy Participa-ção no novo mercado	1 para empresas listadas no novo mercado e 0 para não listadas	(-)	(Allan & Coelho, 2012; Fonteles et al., 2012)

Tabela 1. Variáveis da pesquisa

Fonte: Produzida pelos autores.

A partir das variáveis e objetivo do presente artigo, foi montado o modelo econométrico baseado em Forti & Freitas (2020) e Forti et al. (2015). O modelo econométrico foi executado pelo método Tobit, que é o mais indicado para amostras que possuam dados com amostras censuradas (37% da base apresentou dados zerados para a variável dividendos).

Pelo resultado do teste de Hausman, refutou-se a utilização dos dados aleatórios, o que impossibilitou a utilização do painel de dados Tobit, desta maneira foram utilizados os Efeitos Fixos (teste de Hausman) e o método Pooled Tobit (Rodrigues et al., 2019).

Para se responder ao objetivo e as hipóteses do presente artigo, foi realizada ainda a interação das variáveis DISE e DCRISE a fim de se investigar o papel complementar de sinalização ao mercado e aos acionistas das boas práticas de sustentabilidade da organização em épocas de crise e consequente redução dos dividendos em crises financeiras.

O modelo proposto é, portanto:

Dividendosi,t =  $\beta 0$  +  $\beta 1$ Tamanhoi,t +  $\beta 2$ ROAi,t +  $\beta 3$ Alavancagemi,t +  $\beta 4$ Crescimento dos Lucrosi,t +  $\beta 5$ DISEi,t +  $\beta 6$ DCrisei,t +  $\beta 7$ DNMi,t +  $\beta 8$  (DCRISEit x DISEit) + SETORi + ANOt +  $\epsilon i$ ,t

Notas: i e t se referem a empresa e ano;  $\alpha$  intercepto da regressão; SETOR dummies de setor; ANO dummies de ano;  $\epsilon$  termo de erro da regressão.

# 4 Análise dos Resultados

esta seção serão apresentados os resultados obtidos na pesquisa, iniciando-se pela análise da estatística descritiva e análise de correlação dos dados, dispostos nas Tabelas 2 e 3, respectivamente. Antes, contudo, destaca-se o procedimento de winsorização aplicado sobre a base de dados ao nível de 2%, como forma de repelir na base os outliers, cujo resultado está visível na Tabela 2. Por esta análise, nota-se melhor comparabilidade entre os números e maior alinhamento

dos mesmos à realidade financeira das organizações. Por tais motivos as análises serão concentradas nos indicadores winsorizados.

Pela análise descritiva dos dados, identificou-se que, para o número de 3.853 observações, o dividendo médio distribuído pelas empresas equivale a cerca de 5% do seu patrimônio líquido, variando entre a não distribuição (DIV = 0) até um cenário onde o total de distribuição aos acionistas atinge 50% do valor do patrimônio da empresa.

Quanto ao tamanho (TAM), o valor médio dos ativos totais das empresas analisadas é de R\$1,3bi, variando entre o mínimo de R\$79,8 mil e o máximo de R\$133,5 bilhões. Por sua vez, em relação ao ROA, indicador de rentabilidade sobre os ativos, o valor médio percebido na amostra foi de -6%. Os extremos para tal variável estão entre -319% e 31%. Cabe considerar a respeito destes indicadores que, em média 27% das empresas da amostra encerraram com lucro operacional negativo entre os anos de 2010 e 2020 na base de dados original. Em termos de alavancagem, o resultado médio é de 1,55. Nesta variável, o patrimônio líquido negativo de algumas empresas remete ao patamar mínimo (-7,40). O máximo percebido é de 15,79. A variável CLUC que mede, a partir do lucro operacional, a taxa de evolução anual do lucro das empresas indica que, em média, o lucro do ano atual é menor (21%) que o auferido pelas organizações no ano anterior.

Na análise das dummies, em média 28 empresas compõem anualmente o índice ISE, sendo o ano com maior incidência de empresas neste índice o de 2015, com 33 e os três últimos do período contemplado (2018-2020) os de menor relevância na participação, com 25 empresas. No que tange à participação no Novo Mercado, a média é de 108 companhias, sendo percebido um movimento crescente, de 81 em 2010 (menor patamar) para 155 em 2020, quando o levantamento atinge o seu pico.

Variáveis	Obs.	Média	Desvio Padrão	Mín.	Máx.
DIV	3853	0,06	0,17	-0,37	3,87
TAM	4115	14,09	2,93	0,17	20,85
ROA	4108	-0,48	11,90	-670,19	8,05
ALAV	4115	226,23	14.322,85	-732,04	918.778
CLUC	3986	-2,79	124,61	-7.596,16	549,50
DISE	7315			0	1
DCRISE	7315			0	1
DNM	7315			0	1
Variáveis Winsorizadas	Obs.	Média	Desvio Padrão	Mín.	Máx.
DIV	3853	0,05	0,10	0	0,50
TAM	4115	14,08	2,82	4,38	18,71
ROA	4108	-0,06	0,53	-3,19	0,31
ALAV	4115	1,55	3,42	-7,40	15,79
CLUC	3986	-0,21	2,97	-12,47	10,13

Tabela 2. Estatística Descritiva

Variáveis winsorizadas a 2% exceto DISE; DCRISE;

**DNM:** DIV - Dividendos distribuídos aos acionistas; TAM - Tamanho das empresas; ROA - Retorno do Ativo; ALAV - Alavancagem; CLUC - Crescimento dos Lucros; DISE - Dummy de sustentabilidade; DCRISE - Dummy para crise financeira; DNM - Dummy para crise financeira.

Fonte: Elaborado pelos autores.

Pela análise da Tabela 3, verifica-se que, excetuando-se CLUC, todas as demais variáveis independentes apresentam alta correlação com a variável dependente – DIV. Com relação às variáveis dependentes, as correlações significantes, que estão assinaladas em asterisco (\*), apesar de existirem, não impactam a qualidade dos modelos em termos de multicolinearidade, conforme resultado apresentado através do teste VIF (variance inflation fator), registrado na Tabela 4.

Tabela 3. Matriz de Correlação						
		DIV	TAM	ROA	ALAV	CLUC
	DIV	1				
	TAM	0,1722*	1			
	ROA	0,1691*	0,6138*	1		
	ALAV	0,1804*	0,1947*	0,1386*	1	
	CLUC	0,0235	0,0143	-0,0019	-0,0463*	1

CLUC0,02350,0143-0,0019-0,0463\*1Variáveis winsorizadas a 2%: DIV - Dividendos distribuídos aos acionistas; TAM - Tamanho das empresas; ROA -<br/>Retorno do Ativo; ALAV – Alavancagem; CLUC - Crescimento dos Lucros.

Fonte: Elaborado pelos autores.

A seguir, na Tabela 4 são demonstrados os resultados das regressões de efeitos fixos e Pooled Tobit. Importante destacar que foi realizada a correção de problemas de heterocedasticidade pela estimação das regressões por erros robustos.

Tabela 4. Resultado Regressões

•	Variável Dependente DIV		
Variáveis	Efeitos Fixos	Pooled Tobit	
ТАМ	-0,00559	0,0100***	
ROA	0,00754	0,317***	
CLUC	0,000284	0,0000575 <b>0,00565***</b> <b>0,0454***</b>	
ALAV	0,00241***		
DISE=1	0,000626		
NM=1	-0,0170**	-0,00267	
DCRISE=1	-0,00577**	-0,00488	
DCRISE=1 X DISE=1	-0,0237*	-0,0180	
Setor	Sim	Sim	
Ano	Sim	Sim	
Constante	0,134***	-0,155***	
VIF	1,290	1,290	
Teste de Wald	0,000	0,000	
Teste de Woodridge	0,000	0,000	
Teste de Breuch – Pagan	0,000	0,000	
Teste de Chow	0,000	0,000	
Teste de Hausman	0,000	0,000	
Observações	3753	3753	
RHO	0,665		
Pseudo R2		-1,27	
Log pseudolikelihood		847,854	
Left censored observations		1404	
Uncensored observations		2349	

### DIVIDENDOS E CRISES: EFEITOS NAS EMPRESAS SUSTENTÁVEIS E DEMAIS COMPANHIAS DA B3

Variáveis winsorizadas a 2% exceto DISE; DCRISE; DNM: DIV - Dividendos distribuídos aos acionistas; TAM -Tamanho das empresas; ROA - Retorno do Ativo; ALAV – Alavancagem; CLUC - Crescimento dos Lucros; DISE -Dummy de sustentabilidade; DCRISE - Dummy para crise financeira; DNM - Dummy para crise financeira; Regressões controladas por Ano e Setor. Fonte: Elaborado pelos autores

Primeiramente serão analisadas as variáveis pela regressão por efeitos fixos. A variável ALAV obteve uma significância positiva com dividendos demonstrando que organizações com maiores níveis de alavancagem distribuem maiores dividendos. Este resultado demonstra a sinalização para os investidores que a empresa espera fluxos de caixa maiores no futuro e por isso acaba por pagar maiores dividendos (Forti & Freitas, 2020).

A variável NM também apresentou relação significante, porém negativa, demonstrando que, em virtude da adesão a níveis mais altos de governança corporativa, com maior transparência e maior participação nas decisões pelos acionistas, há menor necessidade de sinalização ao mercado com uma consequente redução nos pagamentos de dividendos (Allan & Coelho, 2012; Fonteles et al., 2012).

Com relação à variável de crise financeira (DCRISE), obteve-se uma relação significante e negativa com a distribuição de dividendos, o que demonstra que em situações de incertezas futuras as organizações utilizam da redução ou até mesmo cortes nos dividendos para se resguardarem financeiramente e poderem melhor combaterem épocas de crises econômicas (Krieger et al., 2020).

A interação entre as variáveis ISE e DCRISE obteve significância negativa com a distribuição de dividendos, demonstrando que, em situações de crise financeira, as empresas detentoras da certificação ISE (melhores práticas de governança e sustentabilidade) conseguem reduzir a distribuição de seus dividendos e focar seus recursos para o melhor enfrentamento da crise financeira. Este achado confirma a hipótese 1 do presente estudo, na qual as organizações que possuem maior disponibilidade de informações no mercado conseguem reduzir os dividendos afim de poderem se resguardarem ante a crises financeiras, não necessitando sinalizar ao mercado robustez financeira, pois esta já é conhecida em virtude de suas informações amplamente divulgadas.

O segundo modelo utilizou a estimação da regressão pelo método tobit que, de acordo com os autores Forti et al. (2015) e Rodrigues et al. (2019), é o melhor método para ser utilizado em variáveis dependentes censuradas (neste caso específico os dividendos). Em virtude da impossibilidade de utilização do painel de dados tobit (teste de Hausman ser negativo para utilização de dados em painel para efeitos aleatórios) a estimação foi realizado pelo método pooled tobit (Rodrigues et al., 2019).

Neste segundo modelo, a variável TAM demonstrou uma relação positiva e significante com a distribuição de dividendos, o que confirma que organizações mais maduras não possuem grandes necessidades de investimentos ou que conseguem obter melhores condições de financiamentos que não sejam pela retenção de lucros e consequente redução de dividendos (Forti & Freitas, 2020; Forti et al., 2015; Rodrigues et al., 2019).

A variável ROA obteve relação positiva e significativa com a distribuição de dividendos, o que demonstra que organizações com maior rentabilidade possuem maior capacidade e, por isso, distribuem mais dividendos (Forti & Freitas, 2020; Forti et al., 2015). Alavancagem (ALAV) assim como no modelo de efeitos fixos, apresentou relação positiva e significativa com a distribuição de dividendos, o que reforça a interpretação que empresas mais alavancadas esperam maiores fluxos de caixa futuros e, desta maneira, pagam mais dividendos (Forti & Freitas, 2020).

Com uma relação positiva e significante, a variável DISE demonstrou ser uma sinalizadora de pagamentos de dividendos, o que demonstra que empresas com certificação de sustentabilidade e governança possuem estabilidade na política de dividendos, gerando maior segurança no investimento de seus acionistas, pois garantem o equilíbrio das participações nos lucros e resultados das organizações a longo prazo (Matos et al., 2020).

A variável dummy de crise, tanto na análise isolada quanto na interação com a variável ISE, apesar de possuírem coeficiente negativos, seguindo a tendência dos resultados encontrados no painel de dados de efeitos fixos, não apresentaram significâncias estatísticas. Não podendo desta forma afirmar que as empresas com certificação ISE em anos de crise reduzem as suas emissões de dividendos.

# 5 Conclusões

presente estudo teve como objetivo evidenciar se empresas possuidoras de certificação ISE na B3, alterariam sua distribuição de dividendos, reduzindo ou até mesmo interrompendo em épocas de crise financeira e, além disso, qual seria a análise comparativa nesse âmbito entre tais empresas e as demais listadas na bolsa brasileira.

Para isso a base de dados utilizada foi de 665 empresas listadas na B3. Destas, anualmente, cerca de 28 em média possuem a certificação ISE. Os resultados foram obtidos por meio de regressões de dados em painel de efeitos fixos e, em seguida, pelo método pooled tobit, que para dados censurados (variável dividendos) se torna o mais recomendável (Rodrigues et al., 2019).

Desta maneira, os resultados por efeitos fixos demonstraram que organizações com certificação ISE em épocas de crise reduzem a distribuição de dividendos e, por conseguinte, focam seus esforços e recursos no enfrentamento da restrição financeira. Estes cortes tornam-se possíveis, em virtude da grande abertura das informações das empresas no mercado e da confiança que elas possuem com relação a robustez financeira, implicando em menor necessidade de sinalização financeira aos seus investidores.

Crises financeiras demonstraram também que mediante as restrições, as organizações reduzem as emissões de dividendos para se protegerem. Além disso, organizações que estão no novo mercado da B3 também reduzem as emissões de dividendos.

Em contrapartida organizações mais alavancadas realizam maiores distribuição de dividendos, pois não são dependentes dos recursos destinados aos acionistas para se financiarem.

Os resultados obtidos por meio do pooled tobit, não confirmaram que organizações certificadas pelo ISE em épocas de crise financeira reduzem as distribuições de dividendos (coeficiente da interação negativo mas sem significância estatística para o modelo).

No entanto o modelo demonstrou que organizações maiores (TAM), com melhores retornos sobre o ativo (ROA) e que são mais alavancadas (ALAV) realizam maior distribuições dos dividendos. Além disso, foi demonstrado que organizações com a certificação ISE também distribuem mais dividendos do que se comparadas as que não pertencem a este índice, o que expressa que estas organizações certificadas possuem maior estabilidade e retornos garantidos aos acionistas. Desta maneira a certificação ISE acaba por se demonstrar como uma sinalizadora de pagamentos de dividendos aos investidores e acionistas.

# 6 Implicações e Pesquisas Futuras

omo implicação, foi demonstrado que apesar de não ser comprovado que empresas com a certificação ISE em épocas de crises reduzem as emissões de dividendos, foi encontrado o resultado que a certificação ISE possui uma função sinalizadora ao mercado da estabilidade de emissão de dividendos.

Não contemplar o pagamento de dividendos mínimos obrigatórios no Brasil foi uma limitação da pesquisa, a partir da qual abrem-se oportunidades para novos trabalhos que podem abranger também a utilização de amostra ampliada, contemplando outros índices da B3. Além disso, no que tange a aspectos de governança corporativa, dado o contexto de distribuição de dividendos, a inclusão de outras variáveis de controle pode conferir novas oportunidades de análise.

# 7 Referências

Abor, J., & Bokpin, G. A. (2010). Investment opportunities, corporate finance, and dividend payout policy: Evidence from emerging markets. Studies in Economics and Finance, 27(3), 180–194. https://doi.org/10.1108/10867371011060018

#### DIVIDENDOS E CRISES: EFEITOS NAS EMPRESAS SUSTENTÁVEIS E DEMAIS COMPANHIAS DA B3

- Allan, P. H., & Coelho, A. C. D. (2012). Dividendos e efeito clientela: evidências no mercado brasileiro. RAE-Revista de Administração de Empresas, 52(4), 448–463.
- B3. (2020). B3 divulga a 16a carteira do ISE B3. Retrieved from https://iseb3site.s3.amazonaws.com/Release\_2020.pdf
- Badea, L., Ionescu, V., & Guzun, A. A. (2019). What is the causal relationship between stoxx europe 600 sectors? But between large firms and small firms? Economic Computation and Economic Cybernetics Studies and Research, 53(3), 5–20. https://doi.org/10.24818/18423264/53.3.19.01
- Bartram, S. M., Brown, G. W., & Stulz, R. M. (2012). Why are U. S. Stocks More Volatile? The Journal of Finance, 67(4), 1329–1370.
- Bhattacharyya, S. S., Sahay, A., Arora, A. P., & Chaturvedi, A. (2008). A toolkit for designing firm level strategic corporate social responsibility (CSR) initiatives. Social Responsibility Journal, 4(3), 265–282. https://doi.org/10.1108/17471110810892802
- Cezarino, L. O., de Queiroz Murad, M., & Resende, P. V. (2020). Being green makes me greener? An evaluation of sustainability rebound effects. Journal of Cleaner Production, 269, 1–10. https://doi.org/10.1016/j.jclepro.2020.121436
- Cruz, B. D. P. A., & Assis, D. R. C. de. (2009). OS REFLEXOS DA CRISE FINANCEIRA NAS PRÁTICAS DE RESPONSABILIDADE SOCIAL DE EMPRESAS DOSETOR DE ENERGIA ELÉTRICA QUE COMPÕEM O ÍNDICE DE SUSTENTABILIDADE EMPRESARIAL DA BM&F BOVESPA. Revista Pensamento Contemporâneo Em Administração, 3(2), 35–50.
- de Freitas, M. C. P. (2009). Os efeitos da crise global no Brasil: aversão ao risco e preferência pela liquidez no mercado de crédito. Estudos Avançados, 23(66), 125–145. https://doi.org/10.1590/s0103-40142009000200011
- Easterbrook, F. H. (1984). Two Agency-Cost Explanations of Dividends. The American Economic Review, 74(4), 650–659.
- Fabregá, M. B., & Nicolau, A. R. (2016). Emprendimiento y supervivencia empresarial en época de crisis: El caso de Barcelona. Intangible Capital, 12(1), 95–120. https://doi.org/10.3926/ic.689
- Fama, E. F. (1974). The Empirical the Dividend Relationships Between and of Investment Firms Decisions. The American Economic Review, 64(3), 304–318.
- Fama, E. F., & French, K. R. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay? Journal of Financial Economics, 60(1), 3–43. https://doi.org/10.1016/S0304-405X(01)00038-1
- Floyd, E., Li, N., & Skinner, D. J. (2015). Payout policy through the financial crisis: The growth of repurchases and the resilience of dividends. Journal of Financial Economics. https://doi.org/10.1016/j.jfineco.2015.08.002
- Fonteles, I. V., Júnior, C. A. P., de Vasconcelos, A. C., & De Luca, M. M. (2012). Política de Dividendos das Empresas Participantes do Índice Dividendos da Bm & FBovespa. Contabilidade Vista & Revista, 23(3), 173–204.
- Forti, C. A. B., & Freitas, K. S. (2020). Relação entre os dividendos e a classificação de rating de empresas brasileiras. Revista Contemporânea de Contabilidade, 17(42), 120–137. https://doi.org/https://doi.org/10.5007/2175-8069.2020v17n42p120 120
- Forti, C. A. B., Peixoto, F. M., & Alves, D. L. e A. (2015). Fatores Determinantes do Pagamento de Dividendos no Brasil. Revista Contabilidade & Finanças, 26(68), 167–180. https://doi.org/10.1590/1808-057x201512260
- Futema, M. S., Basso, L. F. C. & Kayo, E. K. (2009). Revista Contabilidade & Finanças, 20(49), 44-62.
- Gomes, P. H. da C. P., Takamatsu, R. T., & Machado, E. A. (2015). Determinantes da Política de Remuneração do Capital Próprio: Dividendos versusJuros sobre Capital Próprio. REUNIR: Revista de Administração, Contabilidade e Sustentabilidade, 5(2), 62-85.

- Gordon, M. J. (1959). Dividends, earnings, and stock prices. The Review of Economics and Statistics, 41(2), 99–105.
- Heslin, P. A., & Ochoa, J. D. (2008). Understanding and developing strategic corporate social responsibility. Organizational Dynamics, 37(2), 125–144. https://doi.org/10.1016/j.orgdyn.2008.02.002
- Higgins, R. C. (1972). The corporate dividend-saving decision. The Journal of Financial and Quantitative Analysis, 7(2), 1527–1541.
- IBGE. (2021a). Indicadores IBGE Contas Nacionais Trimestrais Indicadores de Volume e Valores<br/>CorrentesCorrentesOut.-Dez.2020.Retrievedfromhttps://biblioteca.ibge.gov.br/visualizacao/periodicos/2121/cnt20204tri.pdf
- IBGE. (2021b). PIB a preços de mercado Taxa acumulada em 4 trimestres (%), 10 trimestre 1996 -40 trimestre 2020. Retrieved from https://www.ibge.gov.br/estatisticas/economicas/contasnacionais/9300-contas-nacionais-trimestrais.html?=&t=series-

historicas&utm\_source=landing&utm\_medium=explica&utm\_campaign=pib#evolucao-taxa

- IBGE. (2021c). PNAD Contínua Trimestral: desocupação recua em cinco das 27 UFs no 4° trimestre de 2020. Retrieved from https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013agencia-de-noticias/releases/30236-pnad-continua-trimestral-desocupacao-recua-em-cincodas-27-ufs-no-4-trimestre-de-2020
- IMF. (2020). WORLD ECONOMIC OUTLOOK INTERNATIONAL MONETARY FUND The Great Lockdown. World Economic Outlook. Retrieved from https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020
- Jensen, M. (1986). Agency cost of free cash flow, corporate finance, and takeovers. American Economic Review, 76, 323–329. https://doi.org/https://doi.org/10.2139/ssrn.99580
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305–360.
- Kambil, A. (2008). What is your recession playbook? Journal of Business Strategy, 29(5), 50–52. https://doi.org/10.1108/02756660810902341
- Krieger, K., Mauck, N., & Pruitt, S. W. (2020). The impact of the COVID-19 pandemic on dividends. Finance Research Letters, 1–7. https://doi.org/10.1016/j.frl.2020.101910
- Lang, L. H., & Litzenberger, R. H. (1989). Dividend announcements: Cash flow signalling vs. free cash flow hypothesis? Journal of Financial Economics, 24(1), 181–191.
- Latham, S., & Braun, M. (2011). Economic recessions, strategy, and performance: a synthesis. Journal of Strategy and Management, 4(2), 96–115. https://doi.org/http://dx.doi.org/10.1108/17554251111128592
- Leite, M., Pamplona, E., da Silva, T. P., Brandt, E. T., & de Oliveira Schlotefeldt, J. (2020). Determinantes do pagamento de dividendos nos períodos de prosperidade e crise econômica em empresas brasileiras. Desafio Online, 8(1), 68–90.
- Lim, K. (2016). The Shift of a Dividend Policy and a Leverage Policy during the 2008 Financial Crisis. International Journal of Finance & Banking Studies (2147-4486), 5(6), 09–14. https://doi.org/10.20525/ijfbs.v5i6.600
- Lintner, J. (1956). Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes. The American Economic Review, 46(2), 97–113.
- Loss, L., & Sarlo Neto, A. (2003). Política de dividendos, na prática, é importante? Revista Contabilidade & Finanças, 14(spe), 39–53. https://doi.org/10.1590/s1519-70772003000400008
- Martins, A. I., & Famá, R. (2012). O que revelam os estudos realizados no Brasil sobre política de dividendos? Rae-Revista De Administracao De Empresas, 52(1), 24–39.
- Matos, P. V., Barros, V., & Sarmento, J. M. (2020). Does ESG Affect the Stability of Dividend Policies in Europe? Sustainability, 12(21), 1–15. https://doi.org/10.3390/su12218804

- Melo, C., & Cabral, S. (2020). A Grande Crise e as Crises Brasileiras : O Efeito Catalisador da COVID-19. Revista Eletrônica Gestão & Soc Iedade, 14(39), 3681–3688. https://doi.org/10.21171/ges.v14i39.3259
- Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. Journal of Business, 34(4), 411–433.
- Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information. Journal of Finance, 40, 1031–1051. https://doi.org/https://doi.org/10.1111/j.1540-6261.1985
- Ranajee, R., Pathak, R., & Saxena, A. (2018). To pay or not to pay : what matters the most for dividend payments? International Journal of Managerial Finance, 14(2). https://doi.org/10.1108/IJMF-07-2017-0144
- Rodrigues, D. R., Fodra, M., de Sousa Ribeiro, K. C., & da Cruz, A. F. (2019). Determinantes Da Distribuição De Dividendos No Brasil: Uma Análise Entre Flexibilidade Financeira E Política De Distribuição De Resultados. Contabilidade Vista & Revista, 30(2), 84–112. Retrieved from https://revistas.face.ufmg.br/index.php/contabilidadevistaerevista/article/view/4800
- Rozeff, M. S. (1986). Growth, beta and agency costs as determinants of dividend payout ratios. Journal of Financial Research, 5(3), 249–259.
- Saeed, A., & Zamir, F. (2020). How does CSR disclosure affect dividend payments in emerging markets? Emerging Markets Review, 46, 100747. https://doi.org/10.1016/j.ememar.2020.100747
- Sampaio, T. C. Q., Coelho, A. C., & Holanda, A. P. (2015). Adoção de conservadorismo nos lucros em períodos de crise financeira: evidências no Brasil. Enfoque: Reflexão Contábil, 34(1), 71– 85. https://doi.org/10.4025/enfoque.v34i1.24922
- Scott, S. (2007). Corporate Social Responsibility and the Fetter of Profitability. Social Responsibility Journal, 3(4), 31–39. https://doi.org/10.1108/17471110710840215
- Sjödin, H., Wilder-Smith, A., Osman, S., Farooq, Z., & Rocklöv, J. (2020). Only strict quarantine measures can curb the coronavirus disease (COVID-19) outbreak in Italy, 2020. Eurosurveillance, 25(13), 1–6. https://doi.org/10.2807/1560-7917.ES.2020.25.13.2000280
- Watts, R. L., & Zimmerman, J. L. (1979). The demand for and supply of accounting theories: The market for excuses. Accounting Review, 273–305.



# Arthur Silva

Universidade Federal do Espírito Santo E-mail: <u>arthur.crss@gmail.com</u>

Lucilaine Pascuci, D.ra. Doutor em Administração Universidade Federal do Espírito Santo E-mail: <u>lucilaine.pascuci@gmail.com</u>

Victor Meyer Jr. Pontifica Universidade Católica do Paraná E-mail: victormeyerjr@gmail.com





Received 07.06.2021 - Reviewed 18.04.2023 - Accepted 19.06.2023 ISSN 1980 -4431 Double blind review



### Abstract

In this study, manifestations of improvisation and its relevance to academic management in a public university were analyzed. The study focused on managerial practices carried out by academic program coordinators. This is a qualitative case study that was based on concepts related to decision making in public administration, university management and organizational improvisation. Data were collected through participant observation, ethnographic interviews and documents, which were analyzed through document and narrative analysis. The results showed that the predominant types of improvisation were ad-hoc and covert, with the latter being due to the strong influence of informality. Other characteristics such as pressure to meet deadlines, experience and creativity were key factors in the improvisational practices identified. Conclusions revealed that improvisational practices were found in the managerial practices of academic coordinators, contributing to not only to solve unexpected problems but also to improve the academic managerial performance.

Keywords: Organizational Improvisation, Academic Management, Public university.

### **1** Introduction

The actions of managers in organizations differ greatly from the classic assumption of the managerial function of planning, organizing, coordinating and controlling (Mintzberg, 1971). In reality, the work of a manager is constituted by tireless and continuous action, represented by brevity, discontinuity and variety of daily activities. This characteristic can also be considered more representative of public institutions whose bureaucratic management, rather than helping to control, often makes processes slower and even ineffective.

Contributions that stem from New Public Management (NPM) have sought to make the management model of these organizations more effective, fluid and interactive (Carvalho and Santiago, 2016; Jeanes, Loacker and Śliwa, 2018; Denhardt et al., 2019), contrary to the instrumental rationality of the mechanistic model (Araújo, 2010; Denhardt et al., 2019). However, this reality does not yet represent the reality of most Brazilian public institutions because it is necessary to overcome characteristics inherent to the public context, such as different understandings regarding priorities between areas and levels of government, budget constraints, rigid processes and discontinuous management (Heidemann, 2009; Bryson; Crosby; Bloomberg, 2014) and internal politics (Baldridge and Deal, 1983). This is the case of public universities which, in addition to the aforementioned characteristics, are also known for their complexity, dynamic nature and plurality (Etzioni, 1964), with co-existing multiple power structures and processes (Baldridge and Deal, 1983). Their components also have a high level of specialization and professional autonomy (Mintzberg, 1979). These characteristics make universities a particular type of organization and make their management a challenge.

Addressing higher education institutions (HEI) means recognizing the importance of their mission in society (Ramirez; Vrangbaek; Pinheiro, 2016) as well their management, particularly their members' micro behaviors and micro actions and their impact at the macro level (Bastedo, 2012; Meyer; Pascuci; Meyer, 2018). This is the case of academic management, which involves a set of decisions and practices related to the core of this institutions: teaching, research and service. And how such activities impact different groups, ranging from students and professors to entire courses (Scaglione; Meyer; Mamédio, 2019; Meyer and Bueno, 2019). Academic management includes decisions and actions related to student admission, processing enrolments, course curricula, learning, and academic performance assessment. In other words, although they are developed at the micro level, these decisions and actions represent the HEI's core activity.

In this pluralistic and complex context of HEI in general, decisions and actions do not follow an essentially linear logic influenced by a bureaucratic structure. On the contrary, the materialization of actions is much more the result of initiatives by academic managers in search for solutions by

coping with the unexpected events responding to challenges. Although routines are used as a standard of reference and guidance to maintain order and organizational processes, the environmental dynamics brings unpredictability pose challenges to managers leading to unconventional practices and change, even the replacement of routines over time in their daily routine imposing new procedures (Meyer, Pascuci and Meyer, 2018). Therefore, it is not uncommon in the academic management context to use alternative and informal mechanisms like improvisation.

Theoretically improvisation is characterized by a contraction between planning and action (Cunha, 2002), in other words, acting without prior reflection. Improvisation, therefore, contrasts with the classic managerial action, through which agents first analyze, decide and then act (Cunha et al., 2014; Cunha; Miner; Antonacopoulou, 2017). Even though studies that deal with improvisation in the field of organizational studies approach this concept from different perspectives (Lissoni; Costa; Moritz; Pereira, 2008) like creative and innovation, this study focuses on organizational improvisation (Cunha; Cunha; Kamoche, 1999; Hadida; Tarvainen, 2015).

To Hatch (2006) the idea of a change in routine is similar to the concept of improvisation, because improvisation is derived from the existence in organizations of a 'minimal structure' (Kamoche and Cunha, 2001), which includes plans, the mission, routines and protocols. Thus, a routine serves as guidelines, reference and support for creativity and innovation, which are necessary for organizational actions, given the dynamics of the environment (Hadida; Tarvainen, 2015).

Therefore, there is a close relationship between improvisation and sensemaking (Weick, 1995), as the latter represents the way in which organizational agents interpret events and create meaning regarding how to enact in relation to them. The same occurs when there is a need to creatively combine the resources available at the time to respond to unexpected demands (Cunha; Cunha; Kamoche, 1999), developing improvisations. Consequently, organizational improvisation can result in learning and even the institutionalization of new practices and routines (Miner; Bassoff; Moorman, 2001; Cunha; Clegg, 2019) that contribute to improved processes.

Considering the dynamic and pluralistic context of university management and the challenges imposed by its unique bureaucracy, this study examined the characteristics through which improvisation manifests in the academic management of a Brazilian public university. This is a qualitative case study that was based on concepts related to decision making in public administration, university management and organizational improvisation.

The aim of this study was to analyze the characteristics of improvisation that takes place in the academic management in a public university. In this effort it is identified triggering factors and motivations, plus manifestations and results. It is also hoped that the results of this study can contribute to the understanding that organizational improvisation is a fundamental mechanism that enables academic managers with flexibility to overcome situations where existing rules and procedures are not sufficient to address the challenges of a complex and dynamic s of the organizational environment.

### **2** Theoretical Framework

2.1 University, unique characteristics and management

Ithough New Public Management (NPG) has been characterized by the idea of a state entity managed in the style of the private sector, focused on decentralization and efficiency (Araújo, 2010; Denhardt, 2019), its achievement remains far from becoming a reality (Heidemann, 2009; Bryson; Crosby; Bloomberg, 2014). There are several characteristics inherent to the history of these public organizations that still need to be overcome. These characteristics include conflicts of interest and their impact on the prioritization of areas and levels of government, budget constraints, rigid processes and the strong political aspect involved in decisions (Heidemann, 2009; Bryson; Crosby; Bloomberg, 2014).

Public universities, in turn, face additional challenges in terms of management. They are composed of multiple groups, with distinct and conflicting purposes (Etzioni, 1964; Jarzabkowski; Fenton, 2006). Among the agents that integrate and interact inside and outside a university are professors, students, civil servants, trade unions, external agencies and the community, who often put their interests on the agenda, influencing management (Hardy et al., 1984; Meyer; Lopes, 2015). Furthermore, universities are organizations with multiple purposes (Etzioni, 1964), reflected in their mission of teaching, research, extension and social work. It is a place where teaching and learning takes place, also where knowledge is produced and applied in a form of services to society.

These are professional organizations (Mintzberg, 1994), in which bureaucratic authority is in constant conflict with professional authority. Discontinuous management (Denhardt, 2012), the collegiate decision-making process and organized anarchy (Cohen; March, 1974) and the loosely coupled system with quasi autonomous areas with weak linkage among themselves (Weick, 1976), what make the linearity between decisions and actions extremely difficult and control quite difficult. Furthermore, the troubled coexistence of diverse and often conflicting interests between central administration, and academic centers and academic programs and make the integration and implementation of actions quite a challenge (Meyer; Pascuci; Meyer, 2018).

The overlapping of roles is another characteristic of universities, especially public ones, which cannot always be associated with the efficiency of processes and management. It is a practice in Brazilian higher education to select faculty members to positions in the academic management area. Mostly without qualification and previous experience in the area. They are amateur managers in universities whose role is graduate professionals for society (Simon, 1967).

According to Marra and Melo (2005), the restrictions facing academic managers limit the adequate development of their functions. For instance, excessive bureaucracy, scarcity of resources and professionals, along with political constraints, reduce possibilities for action, providing a motive for seeking emerging solutions, such as improvisation, so that the goals of academic units can be achieved and their managerial functions can be more effective.

Of the different functions performed by academic managers, this study focuses on the coordination of undergraduate programs. These are professor-managers who are at the head of the process who are directly involved in coordinating and developing teaching, research and extension activities (Carroll and Wolverton, 2004). Academic program coordinators play a fundamental role in universities, as they are responsible for dealing with pedagogical and legal issues, involving students and professors, in addition to maintaining the quality of teaching and learning in their academic programs.

The perception that academic activities follow plans or an explicit set of intentions that control actions is too limited to permit a satisfactory understanding of how actions effectively materialize in the academic context (Hardy et al., 1984). It should also be considered in the academic context that actions, in addition to being planned or prescribed, materialize according to the circumstances and needs of the moment, including the emerging actions necessary to deal with unexpected problems involving different actors (Hardy et al., 1984). These emerging actions may be referred to as improvisations: actions that sidestep the common work routine to deal with unexpected problems or opportunities for change to achieve a specific goal (Vera; Crossan, 2005).

#### 2.2 Organizational Improvisation

coording to Weick (1987), improvisation can be understood as a just-in-time strategy. This strategy is different because it invests less in an attempt to anticipate everything that might happen and emphasizes aspects such as knowledge, an ability to immediately understand a situation and trust in intuition (Weick, 1987). These characteristics enable an individual to deal with unexpected situations under pressure. Cunha, Cunha and Kamoche (1999) associate improvisation with actions developed by the bricoleur, using different material, cognitive, affective and social resources that are available at a given moment to solve a problem.

In this respect, organizational improvisation is characterized as being different from the "Brazilian way" (Damatta, 1983), understood by many as "trickery", an action that seeks to ignore organizational procedures and break institutionally established rules. Acording to Cunha, Bednarek and Smith (2019), improvisation is an action that seeks innovative solutions to handle challenges, surprises and pressure, while at the same time making procedures and routines more robust by complementing them.

Several factors contribute to the dissemination of improvisational actions. For example, reaction to unexpected events (Cunha, 2005; Duarte, 2006), lack of or insufficient routines (Cunha; Cunha; Kamoche, 1999), scarce resources (Cappelli et al., 2010) and autonomy (Weick 1998). Improvisation can occur irrespective of the existence of structured routines due to a responsibility to deal with an emerging problem (Cunha, 2005). Duarte (2006) adds that improvisation can be used by managers to handle unexpected situations, an informal action to achieve goals in spite of organizational bureaucracy.

Improvisation in the absence or insufficiency of routines emerges as a solution to deal with a different or unexpected problem not foreseen by the organization's formal procedures (Cunha; Cunha; Kamoche, 1999). To Moorman and Miner (1998), routines are sometimes insufficient to deal with events and, therefore, the organizational agent is led to ignore procedure, seeking the best way to act, to reflect and build meanings (sensemaking) for their actions (Daft; Weick, 1984). Professional autonomy – characteristic of professors and academic managers – can also be decisive when it comes to improvising in the work environment, as it allows freedom to express creativity (Brown; Eisenhardt, 1997; Weick 1998; Cunha; Cunha; Kamoche, 1999; Fisher; Barret, 2019). Therefore, knowledge, intuition and creativity are key factors in this process (Weick, 1987).

There are different ways in which improvisation can manifest, with its characteristics varying systematically (Cunha et al., 2014) for each organizational problem solved (Cunha et al., 2014). It should be highlighted that different organizational contexts can explain different types of improvisation. Cunha et al. (2014) highlight four ways in which improvisation can manifest: Ad-Hoc, Covert, Provocative and Managed.

Ad-Hoc improvisation is a spontaneous and unpremeditated reaction to deal with unexpected events that arise in daily life. Covert improvisation, in turn, is a local and informal reaction against the organizational status quo. In other words, agents react in their own way, seeking to achieve specific goals. Provocative improvisation, on the other hand, is an attempt to challenge institutionally established procedures with explicit purposes. Finally, Managed improvisation is already legitimized in the organizational context (Cunha et al., 2014) and identified in organizations with a simple structure and rules that simultaneously allow a certain level of structure and autonomy that enable the organizational system to adapt.

The bureaucracy of public universities, combined with dynamic demands and the autonomy of professors, is a favorable context for organizational improvisation (Scaglione; Meyer; Mamédio, 2019). In this context, when managers are faced with time limits if they are to act according to plan, it is common for them to seek new alternatives for action. Thus, improvisation is an alternative to compensate for being short of time, resulting from the adoption of rational procedures such as routines, consisting of action undertaken to enable better chances of adapting to contingencies (Cunha; Cunha; Kamoche, 1999).

Improvisation can contribute to organizational performance, as it can be a source of learning for academic managers (Scaglione; Meyer; Mamédio, 2019). As Schön (1983) pointed out people reflect while they act. Therefore, the reflection of individuals while improvising can lead them to generate new knowledge. Improvisation also favors short-term, incremental learning that, if consistent over time, renews organizational practices (Miner; Bassoff; Moorman, 2001; Cunha; Clegg, 2019), creating routines.

### 3 Methodology

L

This study is qualitative, descriptive and exploratory in nature (Creswell, 2010). As for the ends, it is descriptive and exploratory, and as for the means, it is a case study (Vergara, 2005). The case study is justified as it researches a public, complex and pluralistic organization, which reconciles bureaucracy and, at the same time, the agents' autonomy, a condition met by the federal public university that is the focus of this study.

Primary and secondary data were used in the study (Richardson, 1999). The central strategies for collecting primary data were ethnographic interviews (Spradley, 1979; Tierney, 1991), participant observation, and informal interactions and conversations with the intention of exploring the phenomenon investigated. The secondary data were accessed from laws, resolutions, rules and internal procedures retrieved from websites and provided by the interviewees.

The participant observation took place at the secretariat of an academic program where one of the researchers followed the routine of the office and coordinator's activities involved in dealing with students and professors for 40 days (amounting to 120 hours of observation). The objectives of the observation were the following, first, to understand the functioning of the collegiate program or it would the activities of the Program Coordination. Second, to observe the existence of improvisations, that is, actions taken that were not outlined in the instructions to be followed under certain circumstances. Third, to examine the demands that arose and actions that were taken to solve problems, as well as personal and professional interactions with students, professors, other internal units of the university, external entities and the community. The results of the participant observation were recorded in a field diary.

For the ethnographic interview, an unstructured script was adopted. The interviewees were coordinators of undergraduate programs (courses) at the university. The ethnographic interview is characterized as "engaging in a friendly conversation" (Spradley, 1979, p. 464) with the interviewee and exploring subjects of interest to the research, seeking to gather points of view and opinions by sharing experiences and knowledge (Tierney, 1991). Twenty coordinators of the following undergraduate programs were interviewed: Economics, Social Sciences, Nursing, Management, Production Engineering, Architecture and Urbanism, Music and Law.

The respondents were selected by non-probabilistic or intentional sampling (Richardson, 1999), due to the feasibility of contact in these academic units. Programs from different areas were selected in order to understand the characteristics, reasons and results of the manifestation of improvisation in the behavior of academic managers of programs with different rationales and areas of expertise.

The following criteria were used to select the coordinator interviewees: 1) academic qualification in different fields of knowledge; and 2) experience as a coordinator in the last ten years. During the interviews, the coordinators were asked to identify former coordinators to broaden the sample.

The primary data were analyzed using narrative analysis techniques (Schutt, 2015). In this study, the narrative analysis was used with a focus on analyzing meaning, as the main interest was in real occurrences, experiences and events as told by the participants, concentrating on the content and meanings of the narratives (Elliot, 2005).

The data collected from the interviews and the field diary were organized and interpreted, serving as a basis for the development of narratives. For each interview, a narrative was constructed. In these narratives, an effort was made to explore the manifestations of improvisation, including its characteristics and motivations and results in the management of the courses in question.

### 4 Analysis

he reports and participant observation showed that improvisation in academic management practiced by the program coordinators arose as a response to demands, especially unforeseen ones, that urgently needed to be resolved. It was observed that some types of improvisation

# 46

### IMPROVISATION IN ACADEMIC MANAGEMENT: A CASE STUDY IN A BRAZILIAN PUBLIC UNIVERSITY

presented by Cunha et al. (2014) (Ad-Hoc, Covert and Managed) coexisted in the performance of the interviewed coordinators. Next, the manifestations of improvisation in three micro cases were explored, which were selected for their representativeness in the context and richness of detail.

It was found that students who fail to graduate on time and spend extra years at the university are among the aspects that concern course coordinators, being extremely harmful to the university, with a negative impact on the indicators that measure the "success rate" of undergraduate courses. Therefore, one of the challenges for course coordinators is to find mechanisms to address this bottleneck. Micro Case 1 presents an academic demand related to the enrollment process.

Micro Case 1: A significant number of Alpha Program students were held back in compulsory subjects, due to conflicting schedules in the curriculum with their employment/internship, or due to an insufficient performance coefficient to obtain a place in incomplete disciplines. The offer of some subjects with high rates of students who fail to graduate on time, in alternative schedules, presented a great challenge to the academic program coordination, as it depended on intermediation with other departments responsible for offering these subjects, or even on the professors responsible for these subjects agreeing to offer their subjects at a different time than usual. In many cases, the definition of the schedules that were offered served the interests of the professors rather than the program. Another complicating factor for the program coordination was the inexistence of equivalent disciplines when comparing the schedules of the morning and evening courses. Due to these limitations, the coordinator began to interact with professors to ask about dropouts, that is, places available for the allocation of the students who were unable to graduate on time. Informally, the coordinator made a proposal to professors who offered the same discipline in the daytime and evening courses that would allow students to attend the course at a time other than the class in which they were formally registered, although the students' grades would be entered in the discipline of the class in which they were enrolled. A third initiative adopted to solve the problem was the offer of two agendas with the same discipline code (one for the day course and another for the evening course) so that a certain compulsory subject could be used by students at both times, regardless of the class in which they were formally registered. To gain the support of the collegiate, the coordination justified the proposal as a palliative measure with the intention of lowering the pressure resulting from the number of students who fail to graduate on time while seeking formal mechanisms to solve the problem.

The researcher's participant observation showed that the program coordinators adopted informal mechanisms in their daily lives, seeking greater flexibility so that requests for enrollment in disciplines were met. In this respect, a coordinator highlighted that "[...] many students are unable to enroll in subjects due to the course being held at times when they have employment or internship commitments and even informal jobs" (Report I4). These situations give the coordinator greater flexibility, enabling the enrollment of students who were unable to graduate on time when informally seeking the cooperation of professors, changing the schedule of their subjects or allowing students to attend their classes, even if they are not formally enrolled. This type of situation was observed in Micro Case 1.

As a standard routine, student enrollment can take place on three occasions: 1) when the student enrolls in the subjects offered up to the number of places available; 2) when new places become available due to cancellations of student enrollments or when new classes are offered at the initiative of the program coordinator; and 3) when the program coordination makes manual adjustments to the enrollment system to resolve specific issues.

Faced with the emergency demand to make more places available to reduce the rate of students who fail to graduate on time, the coordinator acted autonomously, that is, without any type of control over his activities. The developed actions were outlined according to their sensemaking (Weick, 1995), seeking a solution for the enrollments that had not been updated. In one case, the manager adopted informal mechanisms of interaction with professors when students were unable to enroll in their programs. Another mechanism was the unconventional use of available instruments, such as the discipline agenda. The adoption of two guidelines with the same code, for different times of the discipline, was also innovative. In both initiatives, Ad-Hoc and Covert improvisation can be

identified, as they are immediate responses to problems as they arise, in addition to informally established interactions with professors.

In this respect, the understanding of coordinators regarding the need to "[...] take a little detour from what is considered conventional" (Report I5) to implement specific actions was found to be natural. In other words, in practice, academic routines and procedures are general guidelines and, at times, they can be considered symbolic, as many demands are effectively handled based on the coordinator's feeling as he seeks the best way to meet demands within the required deadlines. Thus, the manifestation of Managed improvisation (Cunha et al., 2014) was also identified, where the manager's discernment and expertise in the search for solutions coexist.

Another finding was that improvisations can also emerge because of students' specific needs. Micro Case 2, for instance, reports on a more specific demand, (unexpected, in accordance with Weick (1995)), related to the behavior of students with mental problems.

Micro Case 2: On a school day, the coordinator of the Gamma course came across a student who was in a state of psychotic breakdown, with delusions and hallucinations. The coordinator immediately went to talk to the student, aiming to calm him down. With the support of the secretary of the collegiate, he sought the university authorities to inquire about the feasibility of monitoring the health unit, but without success. He then accessed the student's personal information and attempted to telephone to his family, but there was no answer. After some time trying, he managed to contact the student's mother, who was unable to pick him up at the university. Intending to minimize the turmoil generated in the classroom and not leave the student helpless, the coordinator sought to identify the student's address and, accompanied by the secretary, took the student home, explaining what had happened and leaving him in the care of his family.

As shown in Micro Case 2, the researcher's participant observation also shows that the actions of the program coordinator are not limited to teaching and professional guidance for students. Frequently, dealings with students are of a psychosocial nature. In this respect, the observing researcher found that "[...] every day, the course coordinator addresses students' personal demands, issues that directly affect their academic performance and are not found in the Academic Resolutions that define the coordination's activities" (Field Diary). In these situations, it is very common to find demands that generate a need for improvisation. This perception was corroborated by the program coordinator, who stated that "[...] the course collegiate has helped students with health issues, depression [...] and sometimes we coordinators end up listening to the students and giving them advice [...]" (Report I18). The coordinators highlighted that, although their job descriptions do not include offering this kind of help, there is adequate prior preparation for this type of situation, which has become increasingly frequent. Furthermore, students suffering from depression and financial difficulties were evidenced in the researcher's participant observation. On these occasions, although the university has a student aid program, sometimes this support turns out not to be effective. The lack of a protocol for action in these situations means that the coordinator has to seek alternatives and even improvise, depending on the context.

Regarding occasions related to students who have psychological disorders, one of the academic coordinators highlighted that "[...] there is no specific procedure for offering support. It is up to the coordinator to identify the best way to deal with the issue, talk to the student [...]" (Report I6). Improvisation in these circumstances (when it involves psychosocial aspects) depends on the situation of each student, and it is up to the manager to find the best way to act. In this regard, another coordinator pointed out that "[...] students who have psychiatric problems are not entitled to any kind of leave. Students have an obsessive-compulsive disorder or suffer from panic syndrome and cannot go to class [...] so, we negotiate with the professor, and the professor gives them an assignment to do at home [...] (Report I2).

In this Micro Case, the coordinator's improvisation was identified in the decision to take the student home. The formal procedure in situations of illness is to refer the student to the university's health unit but, at that time, psychological medical support was unavailable. As an emergency alternative, the academic manager's first initiative was to calm the student down and contact the

family to inform them of the situation. Seeing that it would not be possible for the family to collect the student at the university, the academic manager took the student home so that the family could provide the necessary care. It is a non-routine action (Cunha; Cunha; Kamoche, 1999), which was reflected and decided on at that time, as a result of the coordinator's sensemaking (Weick, 1995), identifying this option as an alternative action to deal with an unexpected experience. Intuition was also present, as highlighted by the academic coordinator "[...] at the time I just wanted to help the student, I didn't think twice [...]" (Report I5). In other words, the action was non-premeditated and spontaneous (Cunha; Cunha; Kamoche, 1999).

Thus, it can be considered that the coordinator's decision to take the student home to his family is characterized as: 1) an emergency demand, due to the need to address a health issue, highlighting the manifestation of Ad-Hoc improvisation; 2) when taking the student home, the academic coordinator did not act in accordance with the rules or regulations of the university. Therefore, he was offering a spontaneous response to the problem, using his autonomy to develop new actions, which can be characterized as Managed and, at the same time, Covert improvisation, as he failed to comply with the institutionalized procedure.

Another kind of demand that requires an academic coordinator's ability to adapt is represented by changes in legislation, with tight deadlines or the need for support from peers. This is the case of complying with the academic norms of the National Higher Education Evaluation System (SINAES), presented in Micro Case 3. Universities must comply with legal requirements for the accreditation of their teaching, research and extension activities, according to the evaluation instrument (Sinaes, 2018). In this respect, there is an information, assessment and supervision system to ensure the quality of higher education, aiming to gauge the results of the teaching-learning processes, as well as the infrastructure and didactic and pedagogical conditions of higher education courses. This assessment is conducted through an on-site inspection of institutional conditions to determine whether the university is complying with the requirements for teaching quality. Thus, compliance with standards is essential for maintaining the quality of courses and continuing to offer them (Normative Instruction, No. 004, 2016).

It should be highlighted that the rapid changes in the legislation and the slow bureaucracy (Denhardt, 2012) that, especially in the case in public universities, requires academic program coordinators to take emergency actions and even resort to improvisation. This is because the need to enact processes suffers due to the bureaucratic structure of public universities, affecting compliance with deadlines determined by external agencies. This situation was observed in Micro Case 3.

Micro Case 3: Course Beta had a series of normative issues related to the SINAES that lacked solutions, such as adapting to the Pedagogic Program Project (PPC) and the curricular structure. Inspectors from the Ministry of Education found that the PPC lacked certain course contents related to issues, such as ethnic and race relations, and the teaching of African-Brazilian, African and indigenous history and culture. They also found issues in the curricular structure due to insufficient interdisciplinarity and the absence of a description of the program's vocation. In view of these demands, the tight deadline (for the first semester of the following year), and the knowledge that administrative procedures would progress slowly, the academic coordinator adopted mechanisms to ensure greater agility. Regarding the didactic and pedagogical issues, the same coordinator created a committee with three professors to propose changes in the course's curricular structure. Aiming to streamline this process, the academic coordinator interacted with the members of the collegiate, members of the department, the departmental council and Dean of Undergraduate Affairs, to informally articulate a rapid analysis and approval of the changes to the curriculum to sidestep the formal procedures, avoiding difficulties, both personal and procedural, that would hinder the implementation of the necessary changes. This initiative enabled approval without obstacles during the formal procedures, whether in meetings, or with the collegiate and councils responsible for approval.

Given the challenge of meeting the demands on time, the academic coordinator sought mechanisms to anticipate the formal procedures of the decision-making process. In other words, he

improvised by interacting informally with the members of the different committees that would assess the changes (members of the program collegiate, the department and the departmental council) to influence them positively and ensure that the decision was favorable when the formal procedures occurred. This situation is demonstrative of Ad-hoc improvisation, as the aim was to meet deadlines, in addition to Covert improvisation, because of the informal interactions, with the intention of influencing decisions to be taken by groups. As highlighted by the academic coordinator in question, "I was asking, talking and convincing the teachers to help implement the decision [to change the curriculum content, the course's curricular structure and the PPC]" (Report I5). This case also highlights the manifestation of Managed improvisation because of the course coordinator's experience as an articulator and expert in the political aspects that surround some decisions in public universities.

The coordinator's behavior, when interacting informally, is characterized as managerial astuteness, enabling the building of relationships favorable to institutional goals. This behavior also reveals the strong political aspect of universities, considering the existence of different groups with conflicting interests in the academic environment.

Therefore, it is possible to identify cases of improvisation and the characteristics of different types of improvisation, in accordance with Cunha et al. (2014), namely, Ad-Hoc Improvisation, Covert Improvisation and Managed Improvisation, as shown in the Table below.

Type of	Preponderant characteristics	Relationship with the presented cases
improvisation	1	1 1
Ad-hoc	<ul> <li>Response as academic demands emerge.</li> <li>Inexistence of a plan. Process of discovering a solution.</li> <li>Temporal synthesis between thinking and acting.</li> </ul>	<ul> <li>High rate of unenrolled students, requiring immediate manual adjustments of several issues (Case 1).</li> <li>Urgent help for a student with a health issue (Case 2).</li> <li>Altering curriculum content of the course in the short term (Case 3)</li> </ul>
Disguised	<ul> <li>Sidestepping formal procedures by identifying more effective informal means.</li> <li>Autonomy that creates opportunities for actions other than institutionalized procedures.</li> <li>Organizational structure of the university enables "informal solutions" – agents act in their "own way".</li> </ul>	<ul> <li>Interaction with professors of disciplines to open more places or to enable students enrolled in different groups to attend classes at other times (Case 1).</li> <li>Program coordinator acted in his own way, aiding a student who urgently needed help (Caso 2).</li> <li>Informal interaction with members from other levels with a view to gaining support to implement decisions with a previously stipulated deal (Case 3)</li> </ul>
Managed	<ul> <li>Gaps in academic routines make it possible to find alternatives to meet demands not included in official formal documents.</li> <li>University structure: presence of flexibility.</li> <li>Wide range of knowledge and/or experience and formulation of new ideas/actions.</li> </ul>	<ul> <li>The coordinator's experience of programs in HEI aided his formal interactions to solve the problem (Case 1).</li> <li>Experience in dealing with students with psychosocial problems enabled him to identify this alternative to help the student – perceiving the importance of providing aid (Case 2).</li> <li>Past experience in the academic context showed him that informal interaction can aid the more rapid achievement of goals (Case 3).</li> </ul>

Source: Research

Regarding the aspects that drive improvisation in academic management, several features of the university context were identified as enhancers of improvisation and are presented below.

The traditional bureaucracy (Hardy; Fachin, 2000) found in the academic structure of the university greatly limits the flow of processes. In other words, a process is submitted to different levels for evaluation until it reaches the level that is interested in it, meaning significant delays. Therefore, in this context, informal interactions are basically institutionalized to streamline the processing of processes and minimize returns in the administrative hierarchy of the university (Hardy; Fachin, 2000). Regarding bureaucracy, one academic coordinator reported that, in the context of the public university, "[...] the thing is so bureaucratic that improvisation is a necessity [...] so I, being a naturally more practical guy, also act this way" (Report I3). It is also necessary to consider the inefficient speed of the university's process flow, which sometimes accounts for this slowness.

The slowness of processes and the scarcity of resources are both motivators of improvisation. Circumstances in which the academic manager needs to seek alternatives, such as using his own resources to compensate for resources that are lacking, may occur in the academic context.

Another motive that was identified is academic managers' lack of organization and planning. No matter how actions are defined or programmed or whether planning is based on the academic calendar, unexpected situations arise, encouraging improvisation to ensure adaptation to non-routine demands, as highlighted by Cunha, Cunha and Kamoche (1999). In this regard, one academic coordinator highlighted that "[...] the lack of planning to receive Ministry of Education's inspectors created the need for all kinds of adjustments" (Report I5). In other words, the necessary responses to the demands of this environment are greatly influenced by disruption or a lack of organization, implying immediate actions.

Discontinuous management in academic program coordination also influenced reworking and adjustments and was considered a motivator of organizational improvisation in public universities. This can be observed in the report of a coordinator who highlighted the need to "[...] improve communication between program coordinators so that the transition of a function from one person to the other does not leave any unresolved activities that need to be developed [...] (Report I4). This was found to be a recurrent situation in public management (Denhardt, 2012), in which projects begun by a management/coordinator are not usually continued by the next managers to occupy the position. One academic coordinator highlighted that, upon assuming the role of academic manager, he found "[...] several pending issues to be settled" (Report I5). It appears that, in the transition from one coordinator's mandate to another, it is essential to take measures to ensure that the new manager is aware of and continues initiatives that are already under way.

Another motivator of improvisation that was identified was academic managers' lack of experience in the role. In this respect, one coordinator highlighted that he was the first academic coordinator of a new undergraduate program and, at the beginning, he "[...] had zero knowledge of how things worked [...] and that was why the actions that were taken were improvised, on the spur of the moment according to what came up" (Report I9). This behavior is explained by the fact that the academic manager is not prepared for this role. On the contrary, he gains knowledge of the details of the position, processes and administrative procedures through practice and experience (Meyer, 2014).

Informal interactions are important to less experienced managers, as highlighted by Mintzberg (1971). Through informal interactions with other agents, such as more experienced technical and administrative civil servants or professors who have already worked in coordination, new coordinators seek the knowledge that they did not have of the activities they are undertaking and the quicker paths and possibilities to conclude processes and solve unexpected problems.

In particular, a lack of knowledge of management and, more specifically, academic management, was also identified among the interviewees. This is representative of amateur management, which is common in universities, as already highlighted by Meyer (2014), as professionals are from different academic backgrounds not necessarily related to the administration of the positions they assume. It is also necessary to consider the lack of knowledge of the unique

# 51

### IMPROVISATION IN ACADEMIC MANAGEMENT: A CASE STUDY IN A BRAZILIAN PUBLIC UNIVERSITY

administrative details of a public university, such as the rules and norms that govern academic positions and procedures, another motivating factor of improvisation that was identified.

Some mistakes, from different sources, were also identified as motivators of improvisation. One coordinator highlighted that "there are situations where we also improvise due to system errors, people's mistakes [...]" (Report I5). Another aspect identified as a possible motivator of improvisation is outdated academic procedures, made obsolete over time, requiring the academic coordinator to seek alternatives, improvising in situations where the old solutions no longer serve.

Professional autonomy (Mintzberg, 1979) also influenced the manifestation of improvisation. As one of the interviewees highlighted, at the university "[...] we have the problem of mismanagement or autonomy, meaning that every professor thinks he owns his own subject and can do as he pleases." (Report I16). In particular, this academic coordinator highlighted the characteristic of the partial autonomy of professors, which gives them the freedom to diverge in some decisions concerning their work, such as teaching methods, definition of a discipline program, what to teach or how to act in the classroom. Therefore, the academic coordinator is limited in terms of control over this aspect with peers, as it is a relationship of shared power (Weick, 1976).

The existence of improvisational practices in everyday life was acknowledge by some interviwees, like the coordinator of the Architecture and Urbanism program. On the other hand, improvisation manifestations was not recognized in the managerial practices by the academic coordinator of Production Engineering program. These examples reveal that perception about the existence of improvisaional practices vary among academic coordinators regardless of the area of knowledge.

### **5** Discussion

Manifestations of improvisation in the academic context are characterized by short-term actions, with considerable informality in the behavior of managers. This is due to the presence of unexpected and non-routine demands that lead coordinators to resort to improvisation. However, even in situations where activities are planned, the manifestation of improvisation was also identified, stimulated by emergency demands or pressure to meet tight deadlines. It was observed that, in the micro cases that were investigated, the predominant types of improvisation were Ad-hoc and Covert, with the latter being due to the strong influence of informality.

Regarding the constructs that constitute improvisation, manifestations of sensemaking, bricolage, creativity and adaptation were observed. Sensemaking influenced improvisation as academic managers analyzed and made sense of the demands that they examined in order to identify possible solutions. The coordinators' autonomy proved to be fundamental in this process.

The presence of bricolage was also identified in most of the improvisations that were examined. Bricolage was predominantly present through the use of social resources, represented by informal interactions between managers, professors, students, and other players to face challenges or even obtain information on processes that lay outside their domain. This behavior was also enhanced by the professional autonomy of the academic manager. Creativity, in turn, was identified and was essential for solving problems through improvisation. However, it was insufficient for the innovation of processes or the modification of work routines or practices in the coordination of the programs in question. It was observed that improvisation in academic management was of an adaptive nature with regard to existing routines, ensuring quick solutions and differentiated alternatives when compared with institutionalized procedures.

The complex and pluralistic context of the university (even more so in public management), with characteristics such as ambiguity, loose coupling, shared power and teaching autonomy, enables academic managers to act in their own way, which leads to a variety of possibilities for solving the same problem, especially considering the sensemaking present in this process. Another aspect of response to public university bureaucracy is that it is common for academic managers to make use of

# 52

## IMPROVISATION IN ACADEMIC MANAGEMENT: A CASE STUDY IN A BRAZILIAN PUBLIC UNIVERSITY

"social resources" in different ways. For instance, by influencing their peers in the decision-making process, or taking steps to anticipate formal procedures, which creates a significant potential for improvisation in academic management.

Despite the existence of academic routines, such as the program coordinator's manual and internal regulations, for everyday demands, situations that require immediate responses are very common. The manifestation of the improvisations in question revealed the generation of knowledge. However, they did not show a break from routines or procedures, which can be justified by the fact that they are dynamic, precise actions, and also by the difficulty involved in implementing changes in the academic context and the lack of interest of those involved in doing so.

As triggers of improvisation, the following factors were highlighted: the excessive bureaucracy of public universities; the scarcity of resources; discontinuous management; amateur management; the heavy workload of program coordinators; outdated and/or incomplete academic procedures; and the professional autonomy of professors.

Just as a significant part of improvisation is based on minimal structures, many of the improvisations identified in academic management, some of them micro improvisations, were found to refer to the continuity of actions. In other words, they are somehow guided by existing academic routines. Other improvisations were responsible for simple but important adaptations.

### **6** Conclusion

The practices of organizational improvisation were mostly characterized as strategic in the academic management under study. It was found that, like other organizational contexts, academic management in public universities provides ample space for the practice of improvisation.

The dynamic nature of the academic context makes it difficult to follow systematized routines. In this context, managers frequently sought to solve urgent problems (time factor), using the resources available at the time. Thus, the inexistence of adequate processes, managerial inexperience and pressure to solve problems stand out. The permanent discontinuity of managers in academic management in a public university means that occupants of academic managerial positions permanently struggle with slow and short-term learning, which strengthens and perpetuates amateur academic management. This is incompatible with the new educational, economic, social, technological and environmental demands currently imposed on today's universities.

The main factors that trigger improvisation practices in the management of academic program coordinators were identified. Thus, factors such as excessive bureaucracy, discontinuity of managerial positions, the manager selection process, amateur management, multiple responsibilities with an excessively heavy workload, invalid academic procedures and professional autonomy all proved to be influential. Another aspect that proved relevant was the lack of knowledge on the part of the managers of the institution regarding the particular aspects and details of the university organization like its complexity and uniqueness that make it very different from other types of organization, with clear implications related to how universities behave and are managed and for which there are no ready-made and adapted models and approaches in this complex context. These are important elements that deserve greater reflection from the managers of public universities and the official agencies that oversee the Brazilian education system.

Responding to the challenges of today's world requires changes from public and private universities. In this respect, seeking greater managerial capacity and agility is a requirement and condition for the academic sector, in which the main functions of teaching, research and extension are concentrated and which constitute the essence of the mission of universities in our society.

A suggestion for future studies is to relate factors such as strategic and improvisational practices to gain a better understanding of how the dynamics of the strategic decision-making process influence improvisation by managers. When formal plans fall short or fail there is always room for improvisational initiatives. Comparative studies considering organizational improvisation in public

and private universities would also aid a better understanding of the influence of the context and specific details of public management on the adoption of improvisational practices.

### 7 References

- Araújo, M. A. D. (2010). Responsabilização da administração pública: limites e possibilidades do gestor público. In: Construindo uma Nova Gestão Pública – Coletânea de textos do I Ciclo de Palestra organizado pela Escola de Governo do RN – Natal. RN: SEARH/ RN.
- Baldridge, J. V., & Deal, T. (1983). The Dynamics of Organizational Change in Education. Berkeley: McCutchan Publishing Corporation.
- Bastedo, M. N. (2012). Organizing higher education: a manifesto. In: Bastedo, M. N. (Org.). The Organization of Higher Education: Managing Colleges for a New Era. Baltimore: John Hopkins University Press. p. 3-18.
- Brown, S. L., & Eisenhardt, K. M. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. Administrative Science Quarterly, v. 42, n. 1, p. 1-34.
- Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2014). Public Value Governance: Moving beyond Traditional Public Administration and the New Public Management. Public Administration Review, v. 74, n. 4, p. 445-456.
- Meyer, V., Bueno, P. V. (2019). The academic Master's Program in Management: is it relevant to professional practice? Revista de Negócios, v. 24, n. 2, p. 44-60.
- Cappelli, P., Singh, H., Singh, J. V., & Useem, M. (2010). The India Way: Lessons for the US. Academy of Management Perspectives, v. 24, n. 2, p. 6-24.
- Carvalho, T., & Santiago, R. (2016). Transforming Professional Bureaucracies in Hospitals and Higher Education Institutions. In: Pinheiro, R., Geschwind, L., Ramirez, F. O., Vrangbæk, K. (Orgs.). Towards A Comparative Institutionalism: Forms, Dynamics and Logics Across the Organizational Fields of Health Care and Higher Education. Bingley: Emerald Group Publishing Limited, p. 243-269.
- Carroll, J. B., & Wolverton, M. (2004). Who becomes a chair? New Directions for Higher Education, n. 126, p. 3-10.
- Cohen, M., & March, J. (1974). Leadership and Ambiguity: the American College President. 2.ed. Boston: Harvard Business School Press.
- Creswell, J. W. (2010). Projeto de pesquisa métodos qualitativo, quantitativo e misto. Porto Alegre: Artmed.
- Cunha, M. P., Cunha, J. V., & Kamoche, K. (1999). Organizational improvisation: what, when, how and why. International Journal of Management Reviews, v. 1, n. 3, p. 299-341.
- Cunha, M. P. (2002). All that jazz: três aplicações do conceito de improvisação organizacional. Revista de Administração de Empresas, v. 42, n. 3, p. 36-42.

- Cunha, M. P. (2005). Adopting or adapting? The tension between local and international mindsets in portuguese management. Journal of World Business, v. 40, n. 2, p. 188-202.
- Cunha, M., Clegg, S., Rego, A., & Neves, P. (2014). Organizational Improvisation: From the Constraint of Strict Tempo to the Power of the Avant-Garde. Creativity and Innovation Management, v. 23, n. 4, p. 359-373.
- Cunha, M., Miner, A, & Antonacopoulou, E. Improvisation processes in organizations. (2016). In: Langley, A.; Tsoukas, H. (Orgs.). The SAGE Handbook of process organization studies. London: SAGE Publications. p. 559-571.
- Cunha, M., & Clegg, S. (2019). Improvisation in the learning organization: a defense of the infraordinary. The Learning Organization, v. 26 n. 3, p. 238-251.
- Cunha, M. P., Bednarek, R., & Smith, W. (2019). Integrative ambidexterity: one paradoxical mode of learning. The Learning Organization, V. 26 No. 4, pp. 425-437.
- Daft, R. L., & Weick, K. E. (1984). Organizations as interpretative Systems. Academic of Management Review, v.9, n.2, p.284-295.
- Damatta, R. (1983). Carnaval, malandros e heróis. 5. ed. Rio de Janeiro: Guanabara.
- Denhardt, R. B., Denhardt, J. V., Aristigueta, M. P. & Rawlings, K. (2019). Managing human behavior in public and nonprofit organizations. Fifth ed. Thousand Oaks: CQ Press and SAGE Publications.
- Duarte, F. (2006). Exploring the interpersonal transaction of the brazilian jeitinho in bureaucratic contexts. Organization, v. 13, n. 4, p. 509-527.
- Elliott, J. (2005). Using narrative in social research: Qualitative and quantitative approaches. London: Sage.
- Etzioni, A. (1964). Modem Organization. Englewood Clifis: Prentice Hall.
- Fisher, C. M.; Barret, F. J. (2019). The Experience of Improvising in Organizations: A Creative Process Perspective. Academy of Management Perspectives, v. 33, n. 2.
- Hadida, A. L., & Tarvainen, W. (2015). Organizational improvisation: a consolidating review and framework. International Journal of Management Reviews, v. 17, n. 4, p. 437-459.
- Hardy, C., Langley, A., Mintzberg, H., Rose, J. (1984). Strategy formation in the university setting. In: Bess, J. (Org.). College and university organization: insights from behavioral sciences, New York: New York University Press. p. 407-433.
- Hatch, M. J. (2006). Organization Theory: Modern, Symbolic and postmodern perspectives. 2nd ed. New York: Oxford University Press.
- Heidemann, F. G. Do sonho do progresso às políticas de desenvolvimento. (2009). In: Heidemann, F. G., & Salm, J. F. (Orgs.). Políticas públicas e desenvolvimento: bases epistemológicas e modelos de análise. Brasília, DF: UnB. p. 23-39.

- Jarzabkowski, P., & Fenton, E. (2006). Strategizing and organizing in pluralistic contexts. Long Range Planning, v. 39, n. 6, p. 631-648.
- Jeanes, E., Loacker, B., & Śliwac, M. (2019). Complexities, challenges and implications of collaborative work within a regime of performance measurement: the case of management and organisation studies. Studies in Higher Education, v. 44, n. 9, p. 1539-1553.
- Kamoche, K., Cunha, M. P. (2001). Minimal structures: from jazz improvisation to product innovation. Organization Studies, v. 22, p. 733-763.
- Marra, A. V., & Melo, M. C. O. (2005). A prática social de gerentes universitários em uma instituição pública. Revista de Administração de Empresas, v. 9, n. 3, p. 9-31.
- Meyer, V. (2014). A prática da administração universitária: contribuições para a teoria. Universidade em Debate, v. 2, n. 1, p. 12-26.
- Meyer, V. M., Pascuci, L. M., Meyer, B. (2018). Strategies in Universities: tensions between macro intentions and micro actions, Revista de Administração Contemporânea, v. 22, n. 2, pp. 163-177.
- Miner, A. S., Bassof, P., & Moorman, C. (2001). Organizational Improvisation and Learning: A Field Study. Administrative Science Quarterly, v. 46, n. 2, p. 304-337.
- Mintzberg, H. (1971). Managerial work: analysis from observation. Management Science, v. 18, n. 2, p. 97-110.
- Mintzberg, H. (1979). The structuring of organizations. Englewood Cliffs NJ: Prentice Hall.
- Mintzberg, H. (1994). The fall and rise of strategic planning. Harvard Business Review, v. 72, n. 1, p. 107-114.
- Moorman, C., & Miner, A. S. (1998). The convergence of planning and execution: improvisation in new product development. Journal of Marketing, v. 62, n. 3, p. 1-20.
- Ramirez, F. O., Vrangbaek, K., & Pinheiro, R. (2016). Higher Education and health organizational fields in the age of "world class" and "best practices". In R. Pinheiro, L. Geschwind, F. O. Ramirez, & K. Vrangbæk (Eds.), Towards a comparative institutionalism: Forms, dynamics and logics across the organizational fields of health care and higher education (Chap. 2, pp. 35-57). Wagon Lane, Bingley, UK: Emerald. http://dx.doi.org/10.1108/S0733-558X20150000045012
- Richardson, R. J. (1999). Pesquisa Social: métodos e técnicas. 3. ed. São Paulo: Atlas.
- Scaglione, V. L. T., Meyer, V., & Mamédio, D. (2019). Improvisation in Higher Education Management: Coping with Complexity and Organizational Dynamics. Global Journal of Flexible Systems Management, p. 1-12.
- Schön, D. A. (1983). The reflective practitioner: how professionals think in action. England: Ashgate.
- Schutt, R. K. (2011). Investigating the social world: The process and practice of research. Los Angeles: Pine Forge Press.

- Sinaes. (2017). Instrumento de Avaliação de Cursos de Graduação Presencial e a Distância: reconhecimento e renovação de reconhecimento. Disponível em: <http://download.inep.gov.br/educacao\_superior/avaliacao\_cursos\_graduacao/instrumentos/ 2017/curso\_reconhecimento.pdf>
- Spradley, J. P. (1979). The Ethnographic interview. Wadsworth: Cengage Learning.
- Tierney, W. G. (1991). Utilzing ethnographic interviews to enhance academic decision making. New directions for institucional research, n. 72, p. 7-22.
- Vera, D.; Crossan, M. (2005). Improvisation and innovative performance in teams. Organization Science, v. 16, n. 3, p. 203-224.
- Vergara, S. C. (2005). Métodos de pesquisa em administração. São Paulo: Editora Atlas S.A.
- Universidade Federal do Espírito Santo (2016). Instrução Normativa Nº 004/2016. Normatiza as Diretrizes para Elaboração de Projetos Pedagógicos de Curso – PPC – no âmbito da Universidade Federal do Espírito Santos – UFES. Vitória, 01, dezembro. Disponível em: <http://prograd.ufes.br/sites/prograd.ufes.br/files/field/anexo/instrucao\_normativa\_004 2016\_atualizada\_em\_28fev2018.pdf>
- Weick, K. E. (1976). Educational organizations as loosely coupled systems. Administrative Science Quarterly, v. 21, n. 1, p. 1-19.
- Weick, K. E. Substitutes for strategy. (1987). In: Teece, D. J. (org.). The competitive challenge Cambridge. MA: Ballinger, p. 221-233.
- Weick, K. E. (1995). Sensemaking in organizations. Thousand Oaks: Sage.
- Weick, K. E. (1998). Improvisation as a mindset for organizational analysis. Organization Science, v. 9, n. 5, p. 543-555.



Ana Cristina Ferreira, D.ra. Doutora em Administração Universidade Federal de Lavras E-mail: <u>cristina18@hotmail.com</u>

# Daniel Carvalho de Rezende, D.r.

Doutor em Ciências Sociais em Desenvolvimento, Agricultura e Sociedade Universidade Federal Rural do Rio de Janeiro E-mail: <u>rezendedc@gmail.com</u>



RN

Received 03.05.2022 - Reviewed 03.04.2023 - Accepted 19.06.2023 ISSN 1980 -4431 Double blind review



#### Abstract

The objective of this work is to identify the identity aspects of semivegetarian, vegetarian and vegan consumers and to understand how each group perceives one another. The study has a qualitative and descriptive approach. Data collection took place through semi-structured interviews with 42 consumers adept at vegetarian diets. Data were analyzed using Content Analysis, with mixed grid and use of Nvivo Software. The results show that vegetarian identities are multiple and multidisciplinary. There is an expectation when a person declares himself semi-vegetarian, vegetarian or vegan. Thus, identity coherence in their actions is expected. In the virtuous process, the individual understands the position he is currently in and the evolutionary steps he can follow. However, there are also conflicts between the studied groups and within the defined groups themselves. This advanced study in understanding the construction of the identity of semi-vegetarians, vegetarians and vegans, makes it possible to understand the vision that brings them closer to the identities of themselves, and that of others. Therefore, there are differences in perception between semivegetarians, vegetarians and vegans, and these differences in identity are reflected in aspects related to personal life, considering conflicts and the virtuous process.

Keywords: Identity, Semivegetarianism, Vegetarianism, Veganism.

### **1** Introduction

The search to understand "who I am" and "who and what I appear to be" is central and timeless in studies on identity, but since the 1980s, the concept of identity has also become important for management with regard to studies on consumption that have considered modern subjects and their new identities (Barbosa and Campbell, 2006; Hall, 2011; Oyserman, 2009a; Oyserman, 2009b). For Belk (1988), it is not possible to understand consumer behaviour without first understanding the meanings that consumers attribute to possessions, as these are the main reflections of the identities of subjects.

Studies on consumption are generally based on Hall's (2011) conception of postmodern identity, in which identity is multiple and is transformed during life. The identity of a subject is not present at birth but rather is constructed in childhood and reconstructed throughout life based on social relationships that are established. Therefore, it cannot be said that subjects build identity alone because influence is received from the judgement and recognition of others.

These findings also extend to food consumption. Food identity sets cultural continuity and is an extension of society. Food is a permanent mental link, as well as means of building alliances with certain groups. In addition to being located on boundary between natural and cultural, eating is a social act. Thus, eating is increasingly seen as an act that produces meanings that transcend the mere satisfaction of immediate needs (Abonizio, 2016).

In this theoretical context and considering vegetarian diets, Nezlek and Forestell (2020) state that vegetarianism is a social identity and that it is more than a mere dietary choice. For the authors, being a vegetarian has implications for the values, beliefs and attitudes of people. In turn, vegetarian values, beliefs and attitudes have implications on the behaviour (broadly defined) and well-being of those who choose to be vegetarian. For Greenebaum (2012), identifying oneself as vegan or vegetarian is a public declaration of identity, morals and lifestyle. The author emphasizes that a vegan identity must be understood as more than a philosophy or way of being. It must be constructed, specifically, by what is done (and what is not eaten), consumed and bought.

In this context, given the diversity of identities linked to vegetarian diets, this study addresses the following research question: how are multiple vegetarian identities built and how are they related to each other?

This research is justified by the need for a theoretical understanding of how consumer identity, treated here as semivegetarian, vegetarian and vegan, exerts tension on sociohistorical consumption patterns, understood as the normalized consumption of meat foods, and market cultures – which Arnould and Thompson (2007) consider as tribes or microcultures – in which the market acts as a mediator of social relations. These market cultures point to the ideologies of markets, in which there are actions

contrary to the normalized codes and which lead to alternative ideological forms of consumer identities (in this case, those who adhere to a vegetarian diets). Thompson et al. (2013) state that it is common for studies to exclusively study the construction of identity through consumption. For them, it is important for new research to strive to explain phenomena that occur in certain contexts, as the present study, which focuses on the context of vegetarian diets.

Socially, it is important to consider the growth in the number of individuals who adhere to a vegetarian diet. A study by the GFI (2020), together with the IBOPE, indicated that half of the Brazilian population reduced their consumption of meat in 2020, choosing to eat less meat during meals and to consume this food less times per week.

### 2 Identity and Food Consumption

Vieira (2007) notes that individual identity is caused by a dialectical relationship between the biological, the psychological and the social and therefore represents a complex mental construction because for himself/herself, a subject perceives himself/herself as unique, but for the group, he/she perceives himself/herself as equal. Identity can be understood as the identification of a subject with certain groups or the recognition of a subject by other people. Alternatively, identity can also be associated with an image that is constructed of oneself, a vision that connects identity to the notions of self-awareness of who one is.

Thus, the construction of identity is a phenomenon that occurs in reference to others and in reference to the criteria of acceptability and credibility, a process that occurs through direct negotiation with others (Dubar, 2005). Identity coherence is important because belonging to certain groups can foster consistent beliefs and values (at least, that is what is expected of everyone involved). However, the construction of identity is related to symbolic identification. For him, identities can be multiple; that is, they generate contradictions in the self-representation of the subject and in social life. At this point of contradiction, consumption is a factor that can resolve or intensify this incongruence.

Thus, the various identities of subjects enter into competition and conflict, given the different social groups that support them and the social relationships that prescribe and are prescribed by such identities. Therefore, identity is constructed based on several points of view. In this sense, identity is never given and finished but rather constructed and reconstructed constantly, based on the experiences of the subject (Dubar; 2005; Viana, 2011).

Oyserman et al. (2012) state that identities are social products, providing three justifications. First, people create their identities from what is important to them and to others in a given time and space. Second, identity requires that other people endorse and reinforce this profile, supporting certain personal characteristics. Third, the aspects of a person's identity that matter at a given moment are determined by what is relevant at that exact moment. The authors also say that stereotyped behaviour is a clear way to signal an identity to other people.

In this direction, Sanderstrom et al. (2016) state that within the perception process, people rely on mental images that they attribute to a series of characteristics common to members of a group, which the authors refer to as stereotypes. From this, it is possible to quickly evaluate others, specify their social identities, anticipate their actions and plan their responses and actions. However, these stereotypes can lead subjects to distort, exaggerate or ignore important information about others. Furthermore, identities transform throughout the experience of people and are culturally, emotionally, socially, politically, ideologically, mentally and physically contextualized.

When social relations and inclusion in certain groups influence the formation of the identity of a subject, i.e., social identity, the person agrees with the ideology of the group, with its paradigms. Thus, people use their identities - in the plural, given the multiple character of identity in a subject - to prepare themselves to act in certain situations and to give meaning to the world around them (Hall, 2011; Oyserman, 2009a; Oyserman, 2009b). This process does not happen in a dissociable manner because "we exist not only as subjects but also as collectivities" (Belk, 1988, p.152). Thus, identity is formed in conflicts and social relationships that are added to feelings of belonging and a specific cultural complex (Viana, 2011).

From this perspective, identity is a significant concept for understanding the reasons for consumption and how people consume or why they do not consume. It is through monitoring the reaction of people in relation to products and services, observing what they like or dislike, that individuals discover who they truly are or want to be (Barbosa and Campbell, 2006). Through consumption, subjects can express their values, ideas, beliefs and global identities in relation to social, environmental, political and historical contexts, focused on the experiences, traditions and cultures experienced (Cherrier and Murray, 2007).

Given this context, Douglas and Isherwood (2009, p. 120) state that "goods that serve physical needs - food or drink - are no less meaningful than dance or poetry". For Fischler (1988), in a consumer society, a person's food and beverage preferences are seen as indicators of the individuality of the consumer's taste and sense of style, as well as various other aspects of the subject's consumption. Thus, kitchens act as identity references, given that in the process of the construction, affirmation and reconstruction of these identities, certain cultural elements (including food) can become identity markers. Each of these identities has its own specific form of food expression that is not opposed to the others but coexists with them.

Analysing the consumption of meat foods, when a person who eats meat promotes a reduction in its consumption, such a change can be seen as an internal deviation from the group, compromising this desire because it increases intragroup differences - that is, between those who follow a diet without animal origin. In contrast, when a vegetarian promotes the elimination of meat, differences between the groups are reduced because the approach is viewed equally by other vegetarians. Thus, what is perceived is that a meat eater, so named by the authors, is generally not perceived as a significant identity category and socially taken for granted. Conversely, vegetarians and vegans have a perceived identification that legitimizes them as groups (Groeve et al., 2019). Thus, food identity, in the collective context, is a way for individual consumption to be represented in broad choices around a group of people with the same dietary characteristics.

# **3 Methodology**

his study is classified, in terms of approach, as qualitative because it addresses the universe of deep meanings of relationships, processes and phenomena related to vegetarian identities.

To conduct the study, semivegetarians (those who consume white or red meat at most three days a week) (ADA, 2003), vegetarians (those who consider themselves ovolacto-vegetarians, lacto-vegetarians and ovovegetarians) and vegans (those who do not eat or use any product derived from animals or related to an abusive industry) (Slywitch, 2015) were interviewed.

The first to be interviewed were people known by the researchers, who subsequently provided contact information for potential new participants, and so on, i.e., the "snowball" technique. The number of interviews was defined by the criterion of theoretical saturation, i.e., when no new information emerged from the interviews. Thus, for this study, information began to be repeated in the 11th interview within each group; remaining scheduled interviews were still conducted. Table 1 provides the data of the consumers interviewed, with fictitious names to preserve the identity of the participants, as well as the age and Brazilian state in which they resided at the time of the interview.

	Fictitious name, state, age	Diet time	
-	Helena (MG; 45)	4 years	
	Alice (MG; 22)	5 years	
	Miguel (MG; 30)	11 years	
	Laura (MG; 21)	4 years	
	Manuela (MG; 56)	1 year and 7 months	
	Isabela (SP; 67)	30 years	
Semivegetarians (13)	Artur (MG; 37)	2 yearsand half	
	Sophia (DF; 26)	8 months	
aria	Luísa (MG; 35)	7 years	
get	Heloísa (MG; 20)	5 months	
nive	Valentina (MG; 40)	2 years	
Sen	Cecília (MG; 20)	6 months	
	Eloá (MG; 26)	1 year	
	Lívia (MG; 23)	4 years	
	Heitor (MG; 30)	6 years	
-	Lorena (MG; 19)	9 months	
-	Giovana (MG; 27)	8 years	
-	Liz (RO; 23)	10 years	
-	Antonela (RO; 21)	8 months	
-	Maitê (MG; 53)	4 years	
	Bernardo (SP; 29)	6 years	
-	Clara (MG; 28)	13 years	
15)	Lara (MG, 27)	12 years	
Vegetarians (15)	Théo (MG; 37)	2 years	
riai	Davi (MG; 26)	11 years	
eta	Pedro (MG, 20)	2 years	
Veg	Samuel (MG; 30)	3 years and half	
	Eduarda (MG; 30)	3 years	
	Ísis (MG; 23)	1 year and half	
	Elisa (MG; 27)	2 years	
	Melissa (RO; 36)	2 years	
	Emanuele (MG; 54)	3 years and half	
	Sara (MG; 25)	7 months	
	Ester (DF, 27)	8 months	
	Lorenzo (SC; 25)	4 years	
	Cecília (MG; 25)	1 year	
	Benjamim (MG; 18)	6 months	
<b>⊋</b> [	Alícia (MG; 34)	4 years	
1	Lavínia (MG; 24)	3 years	
ans	Catarina (MG, 36)	10 years	
Vegans (14)	Rebeca (SP; 34)	12 years	
-	Ayla (MG, 19)	2 years	

Table 1. Characterization of the participants semivegetarians, vegetarians e vegans.

Source: Developed by the authors.

Before the interview itself, the participants signed an informed consent form. With consent obtained from every participant, the interviews were recorded for later transcription. Data collection was performed from August to November 2019. The 42 interviews with semivegetarian, vegetarian and vegan consumers resulted in 28 hours, 47 minutes and 33 seconds of recording.

The interview script included questions directed to semivegetarian, vegetarian and vegan consumers regarding the following themes: the meaning of the movement for them; what eating habits say about them; how they consider food a part of their identity; how they perceive other people interpret them; and what image they have of other groups (e.g., semivegetarians were asked to describe the image they have of vegetarians and vegans).

Complementarily, nonparticipant direct observation was performed by the first author at VegFest 8, which took place in Brasília-DF between October 10 and 13, 2019. All stages of observation were recorded in field diaries, totalling 63 manuscript pages.

For data analysis, NVivo software (QSR International) was used for the content analysis, which was performed based on the following precepts by Bardin (2016): (1) pre-analysis of the transcripts; (2) description of the recording units, in which the elements were classified based on their similarities and differences; and (3) treatment and interpretation of the results. Content analysis focuses on thematic or categorical analysis, facilitated by dividing text into units or categories. In addition, a mixed grid was used, as new categories emerged during the data analysis (Bardin, 2016).

### 4 Analysis and Discussion of the Results

In this section, the identity aspects of the three groups of consumers (semivegetarians, vegetarians and vegans) interviewed will be addressed. Food bears meanings similar to and is as important as other areas of consumption and entertainment for the formation of identity (Barbosa and Campbell, 2006; Douglas and Isherwood, 2009). Consumers seek meaning in the products they need in a way that contributes and sustains the image they have or would like to have.

Accordingly, in her first lecture at VegFest 2019 ("We eat what we are"), Alessandra Luglio stated that "food choices reflect their principles; food choices reflect their values". In addition, she provided a quote by Michael Pollan: "When we eat, we take the world into us". For the speaker, food is a form of connection with the body itself. If this occurs, it is through an understanding of their principles and values that their choices are made.

Therefore, it was initially sought to understand how the participants perceived other groups. Thus, each interviewee was asked to describe the identity characteristics of the other groups: the vegetarian participants were asked to describe the attributes of the vegan participants and the semivegetarian participants; the vegan participants were asked to describe the attributes of the semivegetarian participants and vegetarian participant; and the semivegetarian participants were asked to describe the attributes of the semivegetarian participant; and the semivegetarian participants. Based on these descriptions, it was possible to establish identity traits for each group (Table 2).

Table 2. Characteristics of the identity of semivegetarians, vegetarians and vegans in the view of other groups.

J•	Semivegetarians		
	Vegetar.	Vegans	
Positive aspects	<ul> <li>Enthusiastic</li> <li>Collaborator</li> <li>Thoughtful</li> <li>Conscious</li> <li>Concerned</li> <li>Healthy</li> </ul>	<ul> <li>Enthusiastic</li> <li>Concerned</li> <li>Strained</li> </ul>	
Negative Aspects	Complacent Undecided	<ul><li>Undecided</li><li>Undefined Nonexistent</li></ul>	
	Semiveg.	Vegetarians Vegans	
Positive aspects	<ul> <li>Conscious</li> <li>Healthy</li> <li>Evolved</li> <li>Firm</li> <li>Respectful</li> <li>Strained</li> <li>Educated</li> <li>Updated</li> </ul>	<ul> <li>Sensitized</li> <li>Environmental</li> <li>Strained</li> <li>Empathetic</li> <li>Concerned</li> <li>Enthusiastic</li> <li>Curious</li> <li>Apprentice</li> <li>Reflective</li> <li>Willing</li> </ul>	
Negative	-	Complacent	
Aspects		L	
		Vegans	
	Semiveg.	Vegetar.	
Positive aspects	<ul> <li>Evolved</li> <li>Decided</li> <li>Strong</li> <li>Evolved</li> <li>Warrior</li> <li>Respectful</li> <li>Faithful</li> <li>Concerned</li> <li>Engaged</li> </ul>	<ul> <li>Responsible</li> <li>Conscious</li> <li>Empathetic</li> <li>Ethical</li> <li>Active</li> <li>Persevering</li> <li>Courageous</li> <li>Committed</li> <li>Dedicated</li> <li>Healthy</li> <li>Motivated</li> </ul>	
		<ul><li>Warrior</li><li>Fascinating</li></ul>	
Negative	Extremists		

Source: Developed by the authors.

Each participant was also asked to describe themselves as a semivegetarian, vegetarian or vegan. Based on these descriptions, it was possible to further establish identity traits for each group (Table 3).

Semivegetarians	Vegetarians	Vegans	
	Courageous, Ethic	Confederate,	Loving, Activists, Cohesive,
-	Demanding, Peaceful, Positiv	Enthusiastic,	Levelheaded, Combatant,
	Reasoned, Reflective	Sensitized, Sensit	olidarity
Painstaking -		Painstaking	
Collaborators, Enthusiasts, Respectful			-
-	Empathetic, Happy		
Conscious, Concerned, Healthy			

TT 1 1 0 01			• •
Table 3. Characteristics of the	e identity of semivegetarians	vegetarians and	vegans in their own view
	c fuentity of sentitivegetarians,	vegetarians and	

Source: Developed by the authors.

Based on Table 3, there are identity attributes common to the three groups (Conscious, Concerned, and Healthy) and aspects common to two groups, for example, Cautious for semivegetarians and vegans; Cooperative, Enthusiast and Respectful for semivegetarians and vegetarians; and Empathic and Happy for vegetarians and vegans. Thus, the identities have specific characteristics, as shown in Table 4, and therefore, each group will be analysed separately.

Table 4. Identity aspects of semivegetarians, vegetarians and vegans.

Semivegetarians	Vegetarians	Vegans
<ul> <li>Complacent - Enthusiast</li> </ul>	Conscious	Empathic
• Undecided	• Healthy	Conscious
• Concerned	• Respectful	Concerned
• Healthy	• Concerned	• Evolved
• Nonexistent*	Complacent - Enthusiast	• Engaged - Active
		• Extremists - Radicals

**Note.** \* Interviewees do not agree with the existence of semivegetarian (or flexitarians or reductionists) label. Source: Developed by the authors.

# 4.1 Semivegetarians

For the semivegetarians, it is possible to identify four distinct behaviours: 1) those who are Complacent and will not eliminate meat consumption; 2) those who are Undecided about the consumption of meat foods, that is, they may return to their previous consumption pattern or eliminate meat from their diet; 3) those who are Concerned with environmental issues and the exploitation of animals and therefore reduce their consumption of food and derivatives of animal origin (Bakker and Dagevos, 2012); and, finally, 4) those who are considered Healthy because they seek to improve their health through semivegetarianism. Malek and Umberger (2021) state that semivegetarians are primarily motivated by issues considered by the authors as selfish (health, taste, price, and convenience). They intend to consume more plant foods but have no desire to eliminate meat foods completely because they do not feel confident about the nutritional adequacy of meat-free diets.

There was no consensus on the definition of a semivegetarian lifestyle. For some, red meat may be included in a few meals per week. For others, semivegetarian is a diet that allows only the intake of white meat but not every day of the week. This restriction does not extend to other animal products and their derivatives, such as eggs, milk and honey. The fact is that they are meat food reductionists (Bakker and Dagevos, 2012). Thus, for some people, it is unacceptable to call these people "semivegetarians" because to be a vegetarian, one has to, necessarily, eliminate all types of meat (SVB, 2019). In this sense, Emanuele (vegan) states that this issue of classifying semivegetarians, vegetarians and vegans is like a "queue": "Vegans are in the front, concerned with animals and such. I only look at it in the sense of animal causes, of respect. So, it would be a queue; second would be vegetarians; the third would be semivegetarians".

In this sense, some participants stated that they did not agree with the existence (nonexistent) of semivegetarians, placing them as omnivores, i.e., those who feed on all plant and animal possibilities.

Livia (a vegetarian) states, "For me, a semivegetarian who eats white meat is not a vegetarian". Elisa (vegan) and Maitê (vegetarian) also believe that there should be no separation of people who eat meat foods a few times a week because they contribute to the meat industry in the same way as carnists.

In this context, Luna Azevedo, a speaker at VegFest 2019 ("The doubts of those who are in the transition (and after it)"), stated that "naming" people who have some dietary restriction makes people "feel part of the movement". Thus, she presented several definitions, such as Flexitarian - which she also considers as semivegetarian –indicating the flexible consumption of meat foods a few times a week.

Helena (semivegetarian) believes that the vegetarian people "do not look favourably" on the food choices of semivegetarians, claiming that their daughter, who is a vegetarian, always says that "I do not believe you eat fish; fish live". In this sense, Lara (a vegetarian) states that she has "a certain prejudice" towards people who reduce meat consumption because she has the "impression that people who stop eating a type of meat are more concerned with their body, you know? [...] An aesthetic reason like this", not for animal causes. Hector (a vegetarian) follows this line and states that semivegetarians are lazy.

However, Sofia (vegan) states, "it is better to be semivegetarian than to eat meat every day". Catarina (vegan), Alicia (vegan), Esther (vegan), Lavinia (vegan), Isis (vegan), Antonela (vegetarian), Liz (vegetarian), Samuel (vegetarian) and David (vegetarian) also believe that a reduction in meat consumption is beneficial due to the impact on the environment and the benefits to animals - even if semivegetarian people do not have this defined consciousness. For Catarina (vegan), Sara (vegan), Lorena (vegetarian) and David (vegetarian), semivegetarianism is a process that can lead to the complete exclusion of foods of animal origin; in contrast, Sara (vegan) believes that semivegetarians are Indecisive, and as Antonela (a vegetarian) states, it is "interesting they do not stay in this", only reducing the amount of meat that they eat. For these interviewees, semivegetarians are enthusiasts, that is, they are admirers of something greater (such as vegetarianism and veganism) and should strive to achieve this goal.

However, some of the interviewees acknowledge that people who do not follow any vegetarian diet may have difficulty understanding their food choices. Ana, Helena, Heloísa, Alice, Eloá (semivegetarian) claim that they are often called annoying and/or fussy.

In general, semivegetarian interviewees consider themselves Healthy, Concerned, Respectful and Enthusiasts. The other participants perceive them as Undecided and Enthusiasts, that is, as individuals who seek to eliminate meat consumption but who have not yet done so. This effort is acknowledged, by many, as a step towards greater change.

#### 4.2 Vegetarians

For vegetarians, the following characteristics were extracted (Table 4): 1) Healthy, i.e., vegetarians who seek to improve their health through the elimination of meat foods (Bobić et al., 2012; Moreira and Acevedo, 2015); 2) Complacent (as indicated by the vegan participants), i.e., vegetarians who are not yet been willing to completely eliminate foods and products of animal origin, that is, those who are not yet willing to become vegan; 3) and Conscious, i.e., vegetarians who perceive what is right and wrong in their actions and, therefore, can be considered Concerned about the rights of animals and the environment. Therefore, they know the responsibility they have for protecting animals and the environment, in addition to respect and consideration for animals (Abonizio, 2016; Bobić et al., 2012; Moreira and Acevedo, 2015).

Emanuele (vegan), as she did to define semivegetarians, presents the idea of a ladder (or queue), for which the steps represent the evolution of vegetarian consumption. For her, being vegetarian is one step behind being vegan in the evolutionary process because "vegetarians still contribute, in a way, to suffering when they consume eggs or milk or honey and other things".

For Rebeca (vegan), a vegetarian is a Complacent person, or, as Alícia (vegan) states, is not a person who has "reflected on the cruelty involved with the consumption of dairy-derived products", i.e., eggs and milk. For Catarina (vegan), vegetarians are sensitized to the causes advocated by veganism, as shown by Cristina (vegan): a person who began "to be sensitized by other causes, by the animal cause, by the cause for the planet". For Sara (vegan), vegetarians are connected to environmental aspects and are "attentive to their body" (Healthy). For Lavinia (vegan), "I see a vegetarian as a quasi-vegan. I think this

person is on his/her way". In this sense, vegetarians are Enthusiasts, people who want to reach another point, another level, and, therefore, move in this direction, as stated by Théo (vegetarian) and Samuel (vegetarian). For Cecília (semivegetarian), vegetarians are Conscious people who "are doing good". They are Evolved, as stated by Helena (semivegetarian). In this sense, Eduarda (a vegetarian) claims that she has become a more Concerned and demanding person in her consumption choices. For her, it is having Consciousness and self-knowledge about the impacts of her choices.

However, people who are not included in the context of vegetarian diets do not always understand all the causes of the movement and motivations for following such a movement. The vegetarian participants in this study, as well as the semivegetarians, claim that they are poorly understood and labelled as "convincing others to turn [to veganism]" (Clara, vegetarian; David, vegetarian), annoying, insane (Antonela, vegetarian; Théo, vegetarian), crazy (Liz, vegetarian; David, vegetarian), stupid (Théo, vegetarian; Lorena, vegetarian), fussy (Théo, vegetarian; Pedro, vegetarian), sick (Maitê, vegetarian), and hippie (Théo, vegetarian). For them, they are distorted and stereotyped images.

On the other hand, there are those who admire and think that people who follow vegetarianism are "cool" (Antonela, a vegetarian; David, a vegetarian), that "it is a beautiful action and truly transformative" (Liz, a vegetarian), and that vegetarians have "the most open mind for this" (Clara, vegetarian).

In short, the vegan interviewees associate the following adjectives with the identity of the vegetarian participants: Complacent (for the more radical), Concerned and Enthusiast. For semivegetarians, vegetarians are Conscious, Healthy and Concerned about environmental issues. Vegetarians, on the other hand, consider themselves Conscious, Concerned and Respectful.

### 4.3 Vegans

s indicated by the respondents, vegans (Table 4) 1) empathize with animals, i.e., they understand the feelings and sensations of animals, put themselves in the place of animals, indicating Concern. Thus, those who are empathetic and concerned can be considered Conscious about issues related to animals and to the environment. If a vegan is Conscious about the basic principles of veganism, he or she is an Involved person who has advanced his or her actions by placing them within his or her moral values (Abonizio, 2016; Bobić et al., 2012; Greenebaum, 2012). 2). Those who are Engaged are certainly Conscious, Empathic and Concerned; therefore, they can be politically involved in favour of the cause of veganism (Abonizio, 2016; Larsson et al., 2003). 3) Those considered Extremists are also Conscious of their acts and practices, both by themselves and by others (civilians, politicians, businessmen, and entrepreneurs), and, therefore, are more Radical regarding change. Thus, they can also be considered Engaged and Concerned.

Given this, Emanuele (vegan), who presented the concept of the "queue/ladder" for types of consumption - with semivegetarianism being the "first step" vegetarianism the "second step" and vegan the "top" step - states that he admires "vegans, above others, because in my mind, I see them as superior people in the sense of having seen something that many people have not yet seen". Miguel (semivegetarian), similarly, states that vegetarian diets are like a "gradient": "the further away from the meat spectrum, I see that he is slightly more warlike, slightly more concerned, slightly more heroic, because the restrictions are greater".

Cecília (semivegetarian), Antonela (vegetarian) and Maitê (vegetarian) also claim to have admiration for vegans, characterizing them in the following ways: "they are evolved people" (Ana, semivegetarian); "They are highly spiritual people" (Maitê, a vegetarian); "They have a great responsibility; they have an awareness that they want to be part of the whole world" (Antonela, a vegetarian). For Hector (a vegetarian), "[...] they are very determined people who have a lot of empathy; at least everyone I know values this ethical issue".

However, for some semivegetarian respondents, the attitude of vegans is understood as extreme, radical or exaggerated. Isabela (semivegetarian) states, "radical vegans, in the sense, do not wear any leather shoes or use a leather bag. I think it's slightly exaggerated, but in terms of their health, I don't see a problem". Helena (semivegetarian) states that she finds the way that vegan people deal with consumption "extreme" because, for her, "you can have milk, in the same way that you can prioritize an

organic garden, with not too much pesticide, on a large scale, and look for food more closely, which is more sustainable".

In this sense, Sara (vegan) states, "vegans are not always going to be amazing people, little people full of light", and Melissa (vegan) exemplifies, "there are vegan people, for example, who voted for Bolsonaro; there are vegan fascists". Sara (vegan), in turn, says that she likes to portray a "very calm image" to other people and tries not to be "imposing".

Ester (vegan), along these lines, states, "to be vegan, for me, means to make a daily choice that goes against the socioeconomic culture of our country and yet choose it every day because I believe that this is the right thing". That is, for Rebeca (vegan) and Ester (vegan), vegans are activists and fighters (Active and Engaged). Therefore, according to Rebeca (vegan), it is common that within veganism, there are "some breaks; there are cracks. We fight with strategic veganism, which is comfortable veganism, right".

Although many people admire vegans and "they want to imitate vegans and think it's cool, they feel proud" (Sara, vegan), others think it's "idiocy, bullshit" (Sara, vegan); "they make fun of it. They think it's silly, fussy, silly, and the people are kind of crazy" (Emanuele, vegan) or "extremists" (Melissa, vegan).

In this sense, semivegetarians see vegans often as Extremists and Radicals but also as Conscious and Evolved, characteristics also presented by vegetarians. For vegetarians, vegans are Empathic, an attribute also noted by the interviewed vegans, who added that they are Conscious, Concerned, Respectful and Active in the cause of veganism.

4.4 Relationships among the vegetarian diet identity groups

wo patterns of identity dynamics were identified based on the aforementioned results: 1) virtuous process and 2) conflicts.

The virtuous process is related to the evolution of vegetarian diets, understanding that such diets begin with a reduction in the consumption of meat foods, as semivegetarians do, continues with the complete exclusion of meat, as vegetarians do, and culminates in the elimination of all products of animal origin, a behaviour adopted by vegans. In this virtuous process, identities are not conflicting, as they complement each other.

This idea of evolution, transitioning through all the stages until reaching veganism, is evidenced by some participants, such as Manuela, who is a semivegetarian and stated that for her to be an ethical consumer, she should be vegan and not only eliminate food with an animal origin but also modify all behaviours related to consumption. In the same vein, Hector, who is a vegetarian, claimed that he does not consider himself an ethical consumer because he still eats dairy products and eggs (ovolactovegetarian), foods that vegans exclude. Emanuele (vegan) presented this idea of an evolutionary process when she exemplified that vegans are on top, followed by vegetarians and then semivegetarians.

Although criticism is present, in regard to the virtuous process, many vegans and vegetarians understand that a reduction in the consumption of meat foods by semivegetarians is an action that should be acknowledged because, even to a lesser degree, it contributes to a reduction in environmental impacts and in the exploitation of animals.

This behaviour is also observed by vegans in their view of vegetarians. Elisa (vegan), Ester (vegan), Lorenzo (vegan), Catarina (vegan), Cristina (vegan) and Lavinia (vegan) think that vegetarians are hardworking and willing to become and sensitized to becoming vegans.

There are consumers who are opposed and others who are in favour of companies bolstering their menus and/or portfolio of products with vegetarian and vegan options. In the logic of the virtuous process, people in favour of these companies claim that these changes, made to meet the needs of the vegetarian and/or vegan audience, should be recognized as a "breakthrough", that these changes should always be encouraged and that companies should be encouraged to be transparent in their processes (Alice, semivegetarian; Luisa, semivegetarian; Eduarda, vegetarian). Artur (semivegetarian) adds that when companies adapt their menus or products, they help to "demystify" the movement of vegetarian diets and avoid an exploitive industry.

Thus, some interviewees, such as Artur (semivegetarian) and Melissa (vegan), stated that having these food options, even from companies that are not, in essence, vegetarian or vegan, is an important factor, even as a way of understanding the motivations by which people seek these lifestyles. In addition, in the views of Elisa (vegan) and Benjamin (vegan), these companies can contribute to promoting and disseminating veganism because they have more visibility than do companies that are fully vegetarian or vegan. In addition, for Benjamin (vegan), people who are not vegetarian or vegan may try vegetarian or vegan foods and realize that they are flavourful options and suitable substitutes in their diets.

In this context, Ricardo Laurino and Larissa Maluf, speakers at VegFest 2019, argued in favour of nonvegan companies that adopt vegetarian and vegan options in their portfolios. For them, it is necessary to understand that veganism is not being "stolen" by companies but that "veganism is using large companies" and that many people need these foods to make the transition to veganism. Along these lines, Larissa Maluf defended vegan products that "imitate" meats, as, for her, many vegan people feel the need to consume products that generate memories of meat foods in terms of flavour (an aspect also mentioned by Alana Rox at VegFest 2019).

In this virtuous process, Lavinia (vegan) states that despite being a more radical line of veganism, she understands that people may need to feed on plant products that mimic animal meat, and this does not cause the need to further classify types of veganism. For her, any movement that can contribute to a reduction in animal and environmental exploitation should be encouraged. Alicia (vegan) states that veganism should be a movement of acceptance and respect for the time that people spend eliminating all items of animal origin from their consumption patterns. For her, vegans should not feel superior to other people or be aggressive.

The second pattern of perceived identity dynamics refers to identify conflicts. Fischler (1988) considers that food is essential for an individual's sense of identity, and thus, the way groups are organized based on their diet confirms the diversity, unity and alterity of those who eat different ways, potentially leading to conflict. Some conflicts are described in detail below.

a) Conflict between semivegetarians/vegetarians and vegans: Semivegetarians and vegetarians perceive vegans as extreme and radical people. Luísa (semivegetarian), Helena (semivegetarian) consider the stance by vegans as "extreme", "radical" or "exaggerated". For Helena (semivegetarian), vegans are extremists because the consumption of milk and dairy products could be considered organic and sustainable without the need to eliminate the consumption of these foods. Alice (semivegetarian) states that there are "annoying" vegans, i.e., those who "crucify" people who are not vegan, placing themselves as superior to others. David (a vegetarian) states that he is afraid when a person introduces him/herself as a vegan; what if the individual considers the movement "a dogmatic religion", in the sense of wanting to pass the movement as something certain and indisputable. For Bernardo (vegetarian), vegetarian or vegan activism can often be aggressive, and instead of bringing people together, it can drive them apart, having an effect contrary to what is intended, as mentioned above.

b) Conflict between vegetarians/vegans and semivegetarians: Vegans and vegetarians do not recognize semivegetarians as vegetarians or consider them undecided. Helena, who is a semivegetarian, stated that vegetarian people do not "look favourably" on the dietary style of semivegetarians. She cites the example of her daughter, who is a vegetarian, who criticized her for eating fish. In this sense, some of the vegetarian participants in the study said they did not agree with the term semivegetarian, placing individuals with this eating pattern as omnivores, i.e., those who eat plant and animal options. Many argued that there should not be a "label" for people who reduce their consumption of meat foods, as they contribute to the exploitation industry in the same way as omnivores.

c) Conflict between vegans and vegetarians: Vegans see vegetarians as complacent people. For Rebeca (vegan) and Alicia (vegan), people who are vegetarian are complacent because they still contribute to an exploitive industry by consuming eggs, milk and dairy products and honey (without considering other contexts of consumption). They claim that the suffering involved in the extraction of milk and the manufacture of derivatives is even greater than that of animals raised for meat production.

For Rebeca (vegan), vegetarians must transition to veganism to justify their reductionist behaviour and completely eliminate all foods of animal origin; otherwise, to her, vegetarians become complacent.

As an example of a conflict between vegetarians and vegans, during a talk by Luna Azevedo at VegFest 2019, she asked the participants to identify as either vegetarian or vegan. When the vegetarian people raised their hands, the speaker emphasized that they "will get there" indicating that they are still at a lower level and placing veganism as the most appropriate and correct dietary choice.

d) Conflict between vegans and vegans: it is possible to identify conflicts within the vegan movement itself, including in the search for coherence. Sanderstrom et al. (2016) state that groups create their own systems of communication, knowledge sharing, beliefs and behaviours, which are seen as references for actions and interactions between members. Based on this, the authors claim that people identify themselves by having common characteristics, but within a group, there may be opposing actions and thoughts. Catarina, who is also vegan, recognizes that there are some vegans who are more "extremist in some things". Thus, Rebeca (vegan) stated that it is common that within veganism, there are disagreements and "fights" with followers of "strategic veganism", considered by her as complacent individuals. Lavinia (vegan) details that there are two lines within veganism. One is radical abolitionist vegans, who advocate for the elimination of all consumption that may involve animal exploitation; actions by this group include boycotting companies, brands and products that are involved in animal exploitation, in any way. For them, even if a person decreases his or her consumption of products of animal origin, he or she is still contributing to the suffering of animals, as in the case of semivegetarians and vegetarians. This attitude is similar to that of organized vegans identified in a study by Larsson et al. (2003). For the authors, they are people politically engaged in the vegan movement and believe in equality between human beings and animals, defending the nonexploitation of the latter.

In this context of radical abolitionists vegans, Cristina (vegan) and Rebeca (vegan) stated that companies that historically are not considered to be vegetarian and vegan but began to offer options for vegetarian diets are only interested in leveraging their sales.

The other line is pragmatic (also called strategic) vegan abolitionists, who do not use any item of animal origin but believe that other people can start by reducing their consumption of meat foods and then transition to vegetarianism and veganism. This line adheres to the classification of conformed and individualistic vegans described by Larsson et al. (2003). Conformed vegans follow the attitudes and behaviour of the group and are sociable with vegetarians. However, for the authors, such people may give up on veganism because they are not engaged with the vegan movement. Conversely, individualists are more convinced of their decision to be vegan, are respectful of omnivorous people and do not try to convince others that veganism is the only possible dietary pattern.

Thus, these two movements (radical abolitionists and pragmatic abolitionists) come into conflict because they believe, on the one hand, that reducing the consumption of animal products is not enough but, on the other hand, that the reduction in these products should be acknowledged, as previously discussed, in the virtuous process. This discussion extends to the validity of nonvegan/vegetarian companies adapting their menus and products to meet the needs of vegetarian diets.

Thus, conflicts can be explained the consumption of certain objects (considered here, food of animal origin) as contributing to the emergence of conflicts, both internal (in the meaning of being) and external (in the resistance or difficulty in understanding other experiences, understood as other types of vegetarian diets). In this sense, the choice of goods continuously creates certain patterns of discrimination that are arranged in perspectives and hierarchies that reinforce or surpass other patterns (Douglas and Isherwood, 2009).

These four conflicts identified through interviews can signal the discrediting of one group in relation to another. For example, when semivegetarians and vegetarians perceive an extreme and radical stance by some vegans, they create aversion and resistance to the group, inhibiting positive exchanges that could occur because they are involved in the same movement, the movement of vegetarian diets.

When vegetarians and vegans do not consider the existence of semivegetarian consumers, they can discourage the greatest changes that could occur and contribute to the movement as a whole. Likewise, when vegans are critical of vegetarians and classify them as complacent, they can generate barriers that

inhibit the adhesion of more people to a vegetarian diet. In all cases, the existence of these conflicts can accentuate the aversion of one group against another, lead to more conflicts and challenges, and thus discredit the identities of each group.

# **5** Conclusion

B ased on the results, vegetarian identities are multiple and multidisciplinary. Thus, regarding identity, this study increased the understanding of the interviewees themselves regarding their identities and the opinion they have about supporters of other vegetarian diets.

In addition, this study considers a group of consumers still little explored and studied, semivegetarians, whose number of supporters has grown significantly in recent years. Moreover, there is an expectation when the person declares to be semivegetarian, vegetarian or vegan. Thus, identity coherence in their actions is expected. In the virtuous process, an individual understands the position that he or she is in currently and the evolutionary steps that he or she can follow. Thus, engagement reinforces the identity of people, as it is linked to beliefs and values.

However, as has been seen, identities can be fluid and accompany expanding movements and can lack substance and not be reconstructed. Thus, conflicts also exist among the groups studied here and within the defined groups themselves. Therefore, there are differences in perceptions among semivegetarians, vegetarians and vegans, and these differences in identity are reflected in aspects related to personal life, considering conflicts and the virtuous process.

These findings demonstrate that when there is a call for the nonexistence of semivegetarians, a proliferation of the belief that vegetarians are complacent, or a perpetuation of the notion that vegans are radicals and extremists, beyond this conflictual relationship, the effects on the movement are negative. However, with an understanding of the virtuous process, these differences can give rise to the understanding that there are phases, often necessary, to achieve a consumption pattern that is as free as possible from animal cruelty and from negative effects on the environment.

# **6 Implications and Further Research**

Where the implications for the strategic actions of entities that promote these diets, a contribution of this study is the identification of factors that differentiate vegetarian identities in a negative context (evidenced by the four identity conflicts). In this sense, marketing actions can prioritize the virtuous process presented in this research as a reference for distinct but not conflicting identities.

The understanding that each type of diet, from semivegetarian to vegan, can be a stage in a longterm process and that the promotion of tolerance and understanding that each one has limits and different degrees of maturity can strengthen the vegetarian movement as a whole and allow multiple vegetarian identities to coexist in a harmonious way, integrated into a larger identity that encompasses them. The understanding that vegetarianism is a process and that reaching the last stage (veganism) takes time (and that not everyone can succeed in getting there) is important for the growth of vegetarian diets.

The concept of the virtuous process as well as conflicts among and within the groups studied should be critically explored in future research, seeking to contribute to the growth and consolidation of the vegetarian movement. It is possible to link the time an individual chooses a vegetarian diets and the (re)construction of identity and engagement with the movement. It is also possible to verify whether vegetarian identity is associated with the expression of another self-proclaimed identity, such as environmentalist, feminist, and anti-racist.

# 7 References

Abonizio, J. (2016). Conflitos à mesa: vegetarianos, consumo e identidade. Revista Brasileira de Ciências Sociais, 31, pp.15-136.

- American Dietetic Association. (2003). Position of the American Dietetic Association and Dietitians of Canada: vegetarian diets. Journal of the Academy of Nutrition and Dietetics, 103(6), pp748-765.
- Arnould, E., & Thompson, C. (2007). Consumer culture theory (and we really mean theoretics. In Consumer culture theory. Emerald Group Publishing Limited.
- Bakker, E., & Dagevos, H. (2012). Reducing meat consumption in today's consumer society: questioning the citizen-consumer gap. Journal of Agricultural and Environmental Ethics, 25(6), pp.877-894.
- Barbosa, L., & Campbell, C. (2006). Cultura, consumo e identidade. FGV Editora.
- Bardin, L. (2016). Análise de conteúdo. São Paulo: edições 70.
- Belk, R. W. (1988). Possessions and the extended self. Journal of consumer research, 15(2), pp.139-168.
- Bobić, J., et al. (2012). Personality traits, motivation and bone health in vegetarians. Collegium antropologicum, 36(3), pp.795-800.
- Cherrier, H., & Murray, J. B. (2007). Reflexive dispossession and the self: constructing a processual theory of identity. Consumption Markets & Culture, 10(1), pp.1-29.
- Douglas, M., & Isherwood, B. (2009).O mundo dos bens: para uma antropologia do consumo. Rio de Janeiro: UFRJ.
- Dubar, C. (2005). A socialização Construção das identidades sociais e profissionais. São Paulo: Martins Fontes.
- Fischler, C. (1988). Food, self and identity. Social science information, 27(2), pp.275-292.
- The Good Food Institute Brasil (GFI). (2020).O comsumidor brasileiro e o mercado plant-based.Available at: <a href="https://gfi.org.br/2020/12/07/50-dos-brasileiros-afirmam-reduzir-o-consumo-de-carne/">https://gfi.org.br/2020/12/07/50-dos-brasileiros-afirmam-reduzir-o-consumo-de-carne/</a>. Access in: 14 fev 2021.
- Greenebaum, J. (2012). Veganism, identity and the quest for authenticity. Food, Culture & Society, 15(1), pp.129-144.
- Groeve, B., et al. (2019). Okay to promote eating less meat, but don't be a cheat–The role of dietary identity, perceived inconsistency and inclusive language of an advocate in legitimizing meat reduction. Appetite, 138, pp.269-279.
- Hall, S. (2011). A identidade cultural na pós-modernidade. Rio de Janeiro: DP&A.
- Larsson, C. L., et al. (2003). Veganism as status passage: The process of becoming a vegan among youths in Sweden. Appetite, 41(1), pp.61-67.
- Malek, L., & Umberger, W. J. (2021). Distinguishing meat reducers from unrestricted omnivores, vegetarians and vegans: A comprehensive comparison of Australian consumers. Food Quality and Preference, 88, p.104081.
- Moreira, I. P. C., & Acevedo, C. R. (2015). Resistance to consumption and veganism: A study about motivations, values, and feelings. Revista Gestão & Tecnologia, 15(2), pp.50-67.
- Nezlek, J. B., & Forestell, C. A. (2020). Vegetarianism as a social identity. Current Opinion in Food Science, 33, pp.45-51.
- Oyserman, D. (2009a). Identity-based motivation: Implications for action-readiness, procedural-readiness, and consumer behavior. Journal of Consumer Psychology, 19(3), pp.250-260.
- Oyserman, D. (2009b). Identity-based motivation and consumer behavior. Journal of Consumer Psychology, 19(3), pp.276-279.
- Oyserman, D., et al. (2012). Self, self-concept, and identity. In: Handbook of Self and Identity. New York: The Guilford Press, pp.69–104.
- Sanderstrom, K. L., et al. (2016). Símbolos, selves e realidade social: uma abordagem interacionista simbólica à psicologia social e à sociologia. Petrópolis: Vozes.
- Slywitch, E. (2015). Alimentação sem carne: um guia prático para montar a sua dieta vegetariana com saúde. São Paulo: Editora Alaúde.
- Sociedade Vegetariana Brasileira, SVB. (2019). Alimentação Vegetariana. Available at:<https://www.svb.org.br/livros/alimentacao-vegetariana.pdf >. Access in: 08 mai 2019.
- Thompson, C. J., et al. (2013). Discursivity, difference, and disruption: Genealogical reflections on the consumer culture theory heteroglossia. Marketing Theory, 13(2), pp.149-174.

Viana, M. S. (2011). Múltiplos aspectos da identidade na era da comunicação. Revista Espaço Acadêmico, 10(118), pp.176-179.

N

Vieira, A. (2007). Identidade e crise de identidade: reflexões conceituais. In: Vieira, A., & Goulart, Identidade e subjetividade na gestão de pessoas. Curitiba: Juruá, pp.55-73.