

Original Article

Mechanism of change towards the Circular Economy: a case study in the packaging sector under the lens of Institutional Theory

Mecanismo de mudança rumo à Economia Circular: estudo de caso no setor de embalagens sob a lente da Teoria Institucional

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ABSTRACT

Purpose – This article aims to analyze normative isomorphism as a mechanism for institutional change and its potential contribution to the institutionalization of the Circular Economy in the packaging market in Brazil.

Methodology – A qualitative approach through in-depth interviews with a semi-structured script. 23 people from the First sector – government, 15 people from the Second sector – market, and 15 people from the Third sector – Non-Governmental Organizations were interviewed. The snowball sampling technique was used to select the interviewees. The content analysis was conducted with categories defined while exploring the data collected, a posteriori, with NVivo software.

Findings – In Brazil, the pressure for socio-environmental product improvements is concentrated on a portion of the population. Most people focus on economic issues. In addition, Non-Governmental Organizations (NGOs) and supervisory government agencies play a crucial role in directly demanding that laws are complied with and in encouraging and instructing civil society related to the Circular Economy and sustainability.

Research implications – This article contributes to filling gaps identified in the literature, such as Circular Economy studies that investigate the dynamics of stakeholders.

Practical implications – The research shows that there is room for organizations that operate in the packaging market in Brazil to develop and disseminate actions related to the Circular Economy and sustainability to their consumers, which can become a competitive advantage in the sector.

Originality/value – The research pointed out that the perception of those involved in this supply chain is still not unanimous regarding society's demand for a circular economy and sustainable actions.

Keywords: Institutional Theory; Reverse logistics; Circular Economy; Sustainability

RESUMO

Objetivo – O objetivo deste artigo é analisar o isomorfismo normativo como mecanismo de mudança institucional e sua capacidade de contribuir para a institucionalização da Economia Circular no mercado de embalagens no Brasil.

Metodologia – Utilizou-se a abordagem qualitativa e descritiva por meio de entrevistas em profundidade com roteiro semiestruturado. Foram entrevistadas 23 pessoas do Primeiro setor – governo, 15 pessoas do Segundo setor – mercado e 15 pessoas do Terceiro setor – Organizações Não Governamentais. A técnica de definição de amostra bola de neve foi utilizada para selecionar os entrevistados. A análise de conteúdo foi conduzida com categorias definidas durante a exploração dos dados coletados, a posteriori, com o software NVivo.

Achados – No Brasil, a pressão por melhorias socioambientais nos produtos está concentrada em uma parcela da população. A maioria das pessoas foca em questões econômicas. Além disso, as Organizações Não Governamentais (ONGs) e os órgãos fiscalizadores do governo têm papel fundamental na cobrança direta pelo cumprimento das leis e no incentivo e capacitação da sociedade civil relacionada à Economia Circular e à sustentabilidade.

Implicações para pesquisa – este artigo contribui para preencher lacunas identificadas na literatura, como estudos de Economia Circular que investigam a dinâmica dos stakeholders.

Implicações práticas – a pesquisa mostra que há espaço para as organizações que atuam no mercado de embalagens no Brasil desenvolverem e disseminarem ações relacionadas à Economia Circular e sustentabilidade aos seus consumidores, o que pode se tornar um diferencial competitivo no setor.

Originalidade – a pesquisa apontou que a percepção dos envolvidos nessa cadeia produtiva ainda não é unânime em relação à demanda da sociedade por ações de economia circular e sustentabilidade.

Palavras-chave: Teoria Institucional; Logística reversa; Economia Circular; Sustentabilidade

1 INTRODUCTION

European environmental activism is essential for pressuring other countries to draw up ambitious commitments to change their economic models, especially those that most contribute to the destruction of the ozone layer, such as the United States and China. In November 2021, the United Nations Conference on Climate Change ended in Glasgow (Scotland), and despite recognising the tragic effects of the COVID-19 pandemic on the world economy, they reiterated the commitments previously signed (United Nations, 2021). By valuing science, the collaboration between countries, technology exchange and new financing modalities, governments and their industries are expected to mobilise to build a cleaner and more circular economy.

As sustainability becomes critical in business, supply chain management gains strategic importance (Fung et al., 2019). Furthermore, according to Storopoli et al. (2019), supply chain management is one of the main themes that guide research on sustainability. Sustainable Supply Chain Management (SSCM) evolved through independent research in the environmental and social areas. According to Carter and Easton (2011), the SSCM has contributed to the chain organisation achieving better financial performance. In addition, the practice of SSCM offers suggestions for managers to direct their resources in socio-environmental projects better (Carter & Easton, 2011).

In line with this idea, the Circular Economy emerges (also in Europe) as a new way of doing business, in which the linear philosophy of take-make-dispose must be replaced by a circular logic where reduction, reuse and recycling actions are valued (Ghisellini et al., 2016). The path toward the Circular Economy requires significant changes in business models, from product planning to supply chain management. This guideline encourages the generation of new businesses and local green jobs, stimulating industry competition for more efficient production (Cerqueira-Streit et al., 2021).

Forward and reverse logistics of post-consumer packaging are complex activities, especially in developing countries. According to Wiesmeth et al. (2018), there is a lack of Circular Economy studies that understand the dynamics of actors (such as government, companies, and society). Jia et al. (2018) cite Brazil as a developing country that still needs empirical work to understand initiatives and barriers more specifically. Despite demonstrating an important empirical application, Homrich et al. (2018) show concern about the weak theoretical foundations of the Circular Economy.

Coming from classical sciences such as sociology and economics, Institutional Theory understands that organisations can generate and alter rational thinking and the notion of what is correct/appropriate (Besharov & Khurana, 2012). Isomorphism is the concept present in this theory responsible for demonstrating the tendency of organisations to adopt similar behaviours when they perceive good social acceptance (Dimaggio & Powell, 1983).

Given the complexity involved in the management of operations and logistics in the management of solid waste in Brazil and the gaps pointed out by the literature, the following research question was conceived: "How could an institutional change mechanism collaborate on the path towards the Circular Economy, in the Brazilian packaging sector?" Therefore, this article analyses normative isomorphism as a mechanism for institutional change and its ability to contribute to institutionalising Brazil's Circular Economy of packaging.

After this introduction, the theoretical foundation focuses on the central terms: Circular Economy, Sustainable Supply Chain Management and normative isomorphism. Then, the methods section presents the classification of the research, demonstrating how collecting and analysing data obtained from in-depth interviews with 53 (fifty-three) stakeholders active in the packaging chain. The thematic categories created from the subjects' speech are presented and discussed to demonstrate the achievement of the proposed objective. Final remarks present the synthesis of the results, demonstrate the main contributions, suggest future investigations, and assume the present research's limitations.

2 THEORETICAL BACKGROUND

2.1 Circular Economy and Sustainable Supply Chain Management

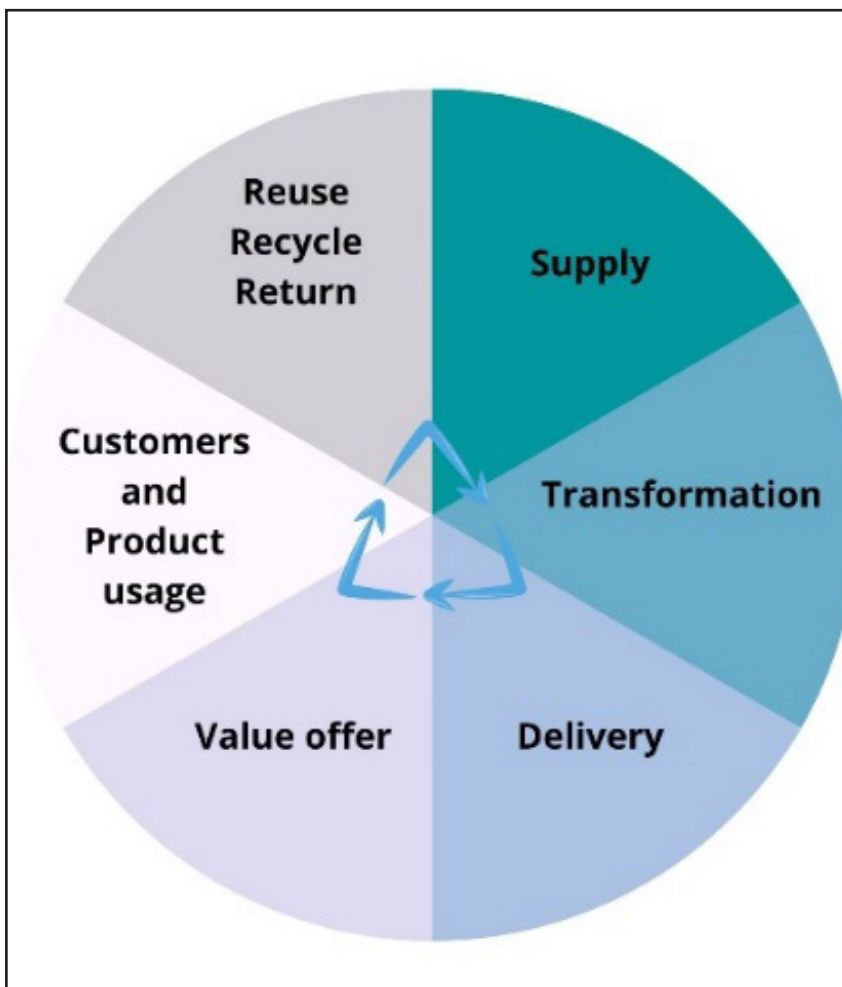
According to Winkler (2011), to obtain a sustainable supply chain at a satisfactory level, it is necessary to achieve four aspects, namely: establishing long-term sustainable organizational objectives (e.g., mission and vision); seeking a win-win relationship between supply chain actors; seek intelligent systems to develop activities and explore cooperation between actors, especially in research and development issues focused on sustainability.

In the same line of reasoning, Hassini et al. (2012) explain that sustainable management of the supply chain is based on six main functions: (i) Supply (search

for renewable sources, fair trade practices, environmental damage, toxic substances and gas emissions); (ii) Transformation (sustainable practices and processes, fair labour practices); (iii) Delivery (transport, location and layout of facilities, inventory, gas emissions); (iv) value proposition (pay more and make the customer feel good, marketing and public relations); (v) customers and product use (energy efficiency, use of green energy, customer education, gas emissions) and (vi) reuse, recycle and return (guide questions: can the product be returned to the environment?; o Can the product be reused in another way? or can the product be recycled efficiently?).

Figure 1 illustrates the six principles that must be considered and managed in a sustainable supply chain.

Figure 1 – Factors to manage in the sustainable supply chain



Source: Adapted from Hassini, Surti and Searcy (2012)

As specified by Park et al. (2010), organisations that adapt their supply chain to sustainability in a competitive environment can stand out from competitors not yet concerned with these issues. In organisations, institutional pressure can be a positive factor for a sustainable supply chain (Xiao & Zeng, 2017).

Sustainable Supply Chain Management, therefore, is seen as the appropriate way to plan a closed-loop system, which seeks to integrate all actors in the supply chain, evolving from linear to circular flow (Winkler, 2011). According to Bressanelli et al. (2019), circularity is an inevitable challenge supply chain management faces. Following Bai et al. (2020), one of the ways to overcome this challenge is through flexible and sustainable management of the supply chain, enabling the achievement of a circular economy. Finally, it is noteworthy that as specified by Genovese et al. (2017), integrating the Circular Economy into the sustainable supply chain has several advantages, especially those related to the environmental aspect.

The alert about the need to integrate the concepts (Circular Economy and SSCM) gained global proportions in the report's launch by the Ellen MacArthur Foundation (EMF, 2013). After all, the central message of this publication is: Supply chain management is essential to overcome the limits imposed by the current economic model, and the Circular Economy is a viable alternative. In many networks, supply risk increases, and the new model reduces price fluctuations and provides more security of supply. In addition to mitigating risks, supply chains aligned with the principles of circularity would be engines of innovation, generate more jobs and greater economic stability in the long term (EMF, 2013).

After conducting a systematic literature review of 42 articles that linked the keywords "circular economy," "sustainability," and "supply chain," Hussain and Malik (2020) interviewed ten senior industrial managers from different supply chains in the United Arab Emirates. The authors reiterate that social factors make the Circular Economy principles viable in the sustainable supply chain. Organisations must create a persuasive discourse with stakeholders before starting practices to ensure the

necessary engagement. Finally, the authors state that scientific works integrating the terms are still scarce, recommending that future studies validate or refute these relationships (Hussain & Malik, 2020).

The integrative literature review conducted by Cerqueira-Streit et al. (2021) searched the Web of Science and Scopus databases for the keywords Circular Economy and Sustainable Supply Chain. Through the Methodi Ordinatio protocol of selecting and ranking of articles, bibliometric information on the leading authors in the area, journals, countries that work most with the theme and most cited papers were first presented. Then, the authors discussed the content of the articles, analysed and generated managerial insights and concluded with an agenda of suggestions for further research. According to Cerqueira-Streit et al. (2021), the COVID-19 pandemic has demonstrated the fragility of supply chains, in addition to highlighting the need for modernization in aspects related to risk/security to minimize the disastrous global consequences that local actions have the potential to achieve.

2.2 Normative isomorphism as a mechanism of institutional change

In its intra-organizational form, institutionalisation is characterised by adopting practices that alter the organisation's status quo, such as responding to authorities or other organisations (Zucker, 1983). The observation of practical cases led Zucker (1983) to infer that the institutional environment tends to change with the adaptation of organisations. This phenomenon occurs due to formal legal pressure (top-down) or when the organisation organically and voluntarily benchmark the best practices in each market (bottom-up). This organisational adaptation to the context that pressures it aims to legitimise the company and maintenance in the long term.

Even though they are sources of stability due to their efficiency, power or culture, institutions also change over time. Disputes between coalitions of actors and bargaining between those who aspire to change and those who are resistant are constant generators of conflicts, which gives relative dynamism to the process.

When changes in the rules and potential power transfer occur between actors, an institutional innovation is configured (Stacey & Rittberger, 2003).

Some studies applied the Institutional Theory when investigating the mechanisms for isomorphic institutional change in different sectors, namely: in health organisations (Misoczky, 2005), in a state-owned oil and gas company (Barbalho & Medeiros, 2014) and in companies in the electricity sector (Silva et al., 2016).

In his theoretical essay, Misoczky (2005) discussed the usefulness of normative isomorphism as an analysis tool for health organisations. The author understood that hospitals live in dynamic and unstable environments, so adaptation must be constant.

Normative isomorphism is a cognitive mechanism arising from persuasion by disseminating beliefs. However, patients, as sick and physically and emotionally incapable, usually do not question medical decisions and therefore do not put pressure on Misoczky (2005).

Misoczky (2005) concludes, faced with the centrality and relative autonomy of the doctor's position in a health organisation, that the normative mechanism is inadequate to investigate this type of organisation. The profession has legitimacy on the part of the population and State bodies, so the regulatory mechanisms influence more than the cognitive/normative ones for the exercise of the profession, which has consequences for the functioning of a health organisation.

Using similar methods (qualitative, descriptive analysis and secondary data collection), Silva et al. (2016) analysed the 4 (four) year sustainability reports of 10 (ten) companies in the Brazilian electricity sector. These companies were chosen because they have an institutionalised metric: the Corporate Sustainability Index (ISE) of the São Paulo Commodities and Futures Exchange – BM&FBovespa (currently B3 – Brasil, Bolsa e Balcão).

The reports were reviewed from the dimensions of the sustainability tripod (economic, social and environmental) and sub-dimensions such as financial performance, human rights and waste to find evidence of isomorphism. Concerning normative

isomorphism, the authors find that companies seek legitimacy when partnering with universities and research institutions, responding to social pressure for increasingly professional projects with fewer negative externalities (Silva et al., 2016).

Institutions are standards to be followed or models legitimised in the long term due to changes that occur for different reasons (Peci et al., 2006). For institutional change to occur based on normative isomorphism, it is believed that people need to demand more professional projects from organisations. Therefore, broader changes would occur motivated by society's demands (DiMaggio & Powell, 1983).

Organisations can influence the environment in which they operate, just as they can be affected. Therefore, a natural dynamism arises from the interactions between organisations capable of generating changes. However, Stacey and Rittberger (2003) explain that institutional changes are slow and incremental. Influencers, leaders, and opinion makers contribute to the extent that, according to Peci et al. (2006), institutionalisation happens when society absorbs values because it considers them correct.

When investigating the promotion of the Circular Economy in the Brazilian coffee capsule chain, Abuabara et al. (2019) indirectly reveal the importance of normative isomorphism. The authors state that conscious consumption is fundamental for valuing companies with socio-environmental practices. In this way, companies begin to perceive reverse logistics not as a mere need for legal compliance but as an attribute the customer considers when purchasing.

Institutionalisation, seen as a process, is described by Tolbert and Zucker (1999). When the last phase (sedimentation) is reached, habits and beliefs are established; thus, a theorisation contributes to a particular behaviour to be transmitted over time. Circular Economy and sustainable supply chain management are expected to reach this level of maturity.

3 METHODOLOGICAL DESIGN

This study can be characterised as qualitative in terms of approach; after all, the subjectivity of the data does not allow them to be translated into numbers, and the observed facts themselves tend to reveal the necessary elements to guide the investigation (Miles & Huberman, 1994). It is also descriptive because it aims to detail the phenomenon studied. Regarding the technical procedure adopted, this research made use of the case study; after all, it aims to know the “how” and “why” of a specific event, requiring an explanatory character in the researcher’s analysis (Yin, 2015). Case studies are characterised by the impossibility of controlling the variables by the researcher since the context is the unit of analysis (Saldanha, 2014). Besides that, it intends to deepen the study of the phenomenon.

To collect data, we conducted in-depth interviews using a semi-structured script. The interviews were considered deep because they lasted, on average, 62 (sixty-two) minutes each. Moreover, we considered semi-structured scripts because the researchers are free to ask more questions or suppress anyone during the interview. Modifying the script previously prepared at the time of the interview can be helpful to make the interviewee more comfortable and, consequently, obtain more sincere and interesting opinions. The snowball technique helped define the sampling. After all, it is an accumulative process, hence the snowball metaphor: the more it travels, its volume increases. This technique is advantageous in the social sciences to access “hidden populations” (Noy, 2008). In this case, the indications of possible interviewees by the interviewees were helpful for the researchers to enter communities of collectors of recyclable materials, prosecutors, and entrepreneurs.

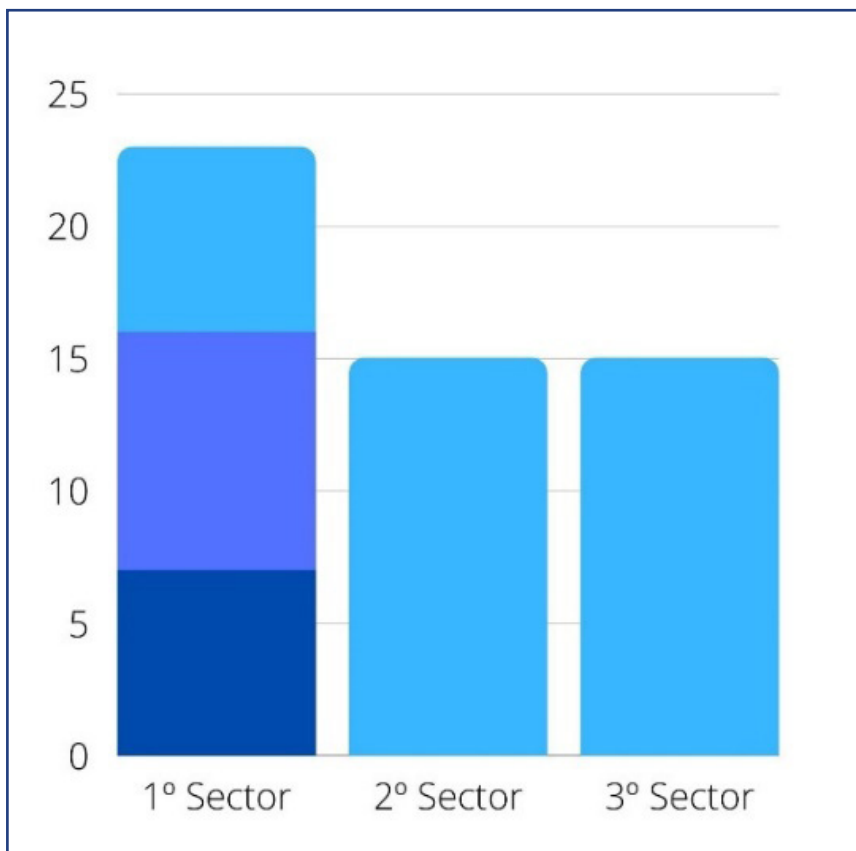
The content analysis works with communication more broadly, also oral and gestural. Document analysis typically presents a clear and concise representation of some fact. In contrast, content analysis requires greater sensitivity from the researcher since the information may not be expressed directly, in addition to the possibility of

making inferences about other realities beyond what was questioned (Bardin, 2011). This research carried out a triangulation of methods as used both document analysis and content analysis of the speech of stakeholders in the packaging chain. Given the extensive database obtained, it was decided to use the NVivo software to speed up and productivity of the analysis. NVivo facilitated looking for patterns after collection, so the qualitative coding also occurred while exploring the material obtained (posterior) (Saldanha, 2014).

Regarding the organisations that participated in this research, a detailed explanation by sector is in order. The political scenario characterises the First sector (Government), and receives resources from tributes, taxes and fines. The Second sector - the market - comprises private organisations of different natures, transforming and commercialising goods or services, generating employment and income, and aiming at a profit for shareholders. The third sector is maintained by resources that may come from the other two sectors (government or companies), as it is not for profit and has public interest in causes usually linked to the State, such as promoting education, improving the quality of health or the environment (Melo, 2016).

For the conduction of this study, the three sectors were relatively balanced. Representatives of the first sector (Government), 23 (twenty-three), were interviewed and divided into federal, state/district and municipal public authorities. It should be noted that some specialists were classified as government members (servants linked to public universities). The second sector (Market) participated in the current survey with 15 representatives. Among them CEOs (Chief Executive Officers), sustainability managers and environmental analysts. The third sector, composed of civil society organisations, was represented by 15 people. From this classification, it should be noted that it was incorporated into cooperatives and associations, as classified by the Public Ministry of Paraná (MPPR, 2022). Figure 2 illustrates the breakdown of the number of respondents by sector.

Figure 2 – Number of respondents per representative instance



Source: Prepared by the authors with help of Canva.com

Data collection took place over three months in the first half of 2021. The information was tabulated as the interviews were carried out, and the transcripts made up the corpus for content analysis.

4 MECHANISM OF CHANGE FOR THE INSTITUTIONALISATION OF CE: NORMATIVE ISOMORPHISM

Normative isomorphism comes from the constant professionalisation of the workers and the raising of the conscience of society in general. According to DiMaggio and Powell (1983), more critical people can pressure other people and organisations to adopt a specific pattern of behaviour. It is important to emphasise that the term translated as “normative” does not mean formal norms, laws or regulations but refers to

tacit norms present in society. Meyer and Rowan (1977) explain that when an organisation incorporates values well accepted by society, these organisations tend to increase their legitimacy and, consequently, their chances of survival/maintenance in the market.

The question sought to understand whether the participants in the packaging chain perceive pressure from society for circular practices to take place. In general, there was a balanced understanding, opinions well distributed between those who believe there is no significant pressure and those who believe there is great and growing pressure.

Between these two extreme opinions, posterior, two categories were created to better adapt the subjects' speech. Some interviewees defend that "There is currently no significant pressure, but they perceive that it has increased". In contrast, another portion affirms that there is a slight pressure but a continuous increase. Table 1 shows the four categories into which it levels and divides, and it should also be noted that for this block, each answer was categorized only once.

Table 1 – Perception of actors about the level of charging society for EC actions

Pressure from society for CE actions	Reference (case study)	Reference (literature)
There is no significant pressure	ESP1, ESP4, PPM4, PPE3, ONG5, EMP8, ESP10	(ABRAMPA, 2020)
There is no significant pressure currently, but notice that it has been increasing	CAT1, ONG3, ESP5, ONG4, PPM1, EMP4, ESP6, PPF2, EMP5, PPE5, PPM5, PPM6, CAT2, ESP7, ESP8, ONG6, PPF3, ONG9, CAT3, ONG1, PPF5, EMP1, CAT4.	(Silveira, 2021)
Yes, the pressure is small but increasing	PPE1, EMP2, EMP3, PPE4, PPM2, PPF4, ONG7, ONG8, ONG9, EMP6, ESP3, EMP9.	(Rauch et al., 2015).
Yes, the pressure is high and growing	PPF1, PPE2, PPM3, PPM7, PPE6, PPE8, ESP2, EMP7, ESP9, ONG2, PPE9.	(Jia et al., 2018).

Source: Prepared by the authors

Among the participants who don't believe that there is pressure from the community, there is concern about the consumer culture in which we live. According

to Oliver (1997), institutional change within and between firms also occurs due to a broader cultural change arising from external influences such as the State and civil society. More specifically, Fuss et al. (2021) argue that cultural values (such as quantity and quality of consumption, mode of production and relationship with disposal) are fundamental for operationalizing the Circular Economy.

The Postgraduate Professor in Business Administration (ESP4), who has been working for over 30 years around sustainability, explains this paradoxical view better. Interviewee CAT2 has been a collector of recyclable material since childhood and today lead the movement in Rio de Janeiro and throughout the country. In his speech, disbelief is due to the difference between “wanting” and “doing”, between thought and action.

ESP4: “It’s an irony because we want the consumer to be sustainable while being bombarded 90% of the time with “consume, consume, consume”. In fact, not only consume, but quickly throw away what you have today so that you can consume more tomorrow.”

CAT2: “When we do a survey, most say they would like to be part of a selective collection and think recycling is important. In general, they know what needs to be done, so I don’t see society as poorly informed as it was 20 years ago. However, that desire to want to do is missing. We can’t just wait on environmentalists. Recycling is not just for a group of people; it must be a collective action.”

Most people believe that pressure from society has grown, with little possibility of significantly interfering with the strategies of large corporations or government institutions. Conforming to Greer et al. (2021), contemporary organisations face a scarcity of resources and growing social pressures.

Although social pressure is growing, the authors comment on the need for severe behavioural and institutional changes if we want to contribute to the transition toward the Circular Economy (Greer et al., 2021). In this sense, corroborate excerpts taken from the speeches of the superintendent of the Secretariat for the Environment and Sustainability of Recife-PE (PPM6), of the founder of a product tracker software company for Reverse Logistics, from Fortaleza - CE (EMP1). Finally, the speech of ONG3,

vice-president of the Brazilian Association of Sanitary and Environmental Engineering of the Federal District, is also highlighted.

PPM6: "I perceive a pressure that you can't even call pressure, it's really an impression. Of course, there are already some stronger segments, there is already fair trade, there is already conscious consumption, but it is still nothing that puts pressure on the big ones."

EMP1: "There is no pressure from society on this issue of waste. More has been said about this, but we have so many other problems related to the environment that these end up being second or third. It is enough for us to notice that there are municipal elections where waste management is not even touched by the majority of candidates."

ONG3: "About the pressure from society, I think it has increased over time, but it still doesn't hurt big corporations. We must treat the Circular Economy like football because in football, the fans push enough for changes to happen."

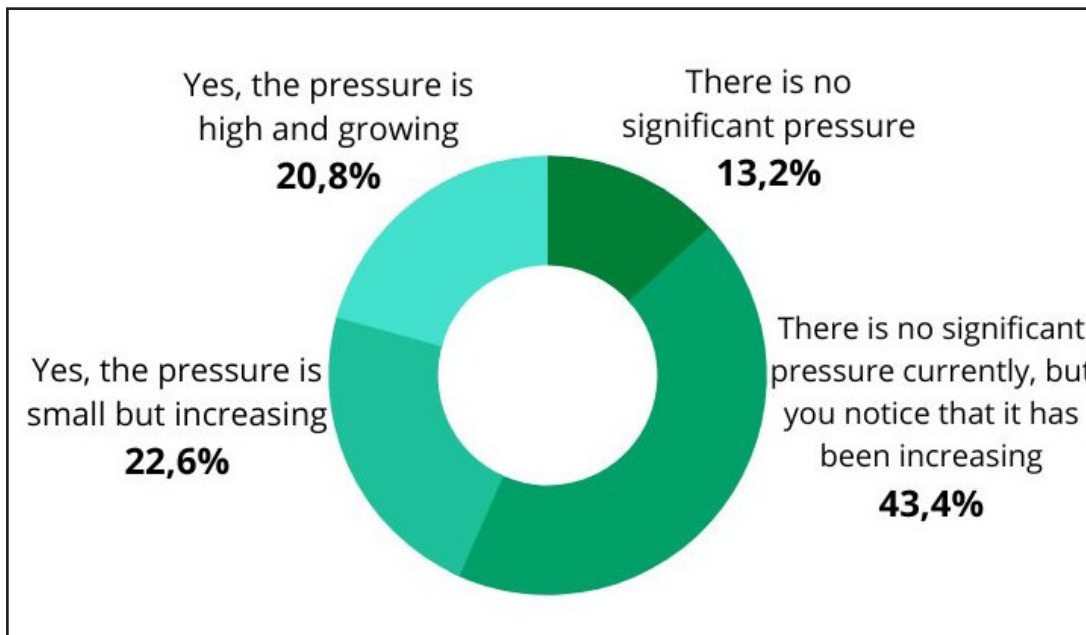
It is clear, therefore, that society's pressure on the issue of waste management is still concentrated on a small portion of the population. Most people are preoccupied with other issues (mainly economic), which still distances them from discussions qualified enough to push for change. Environmental consultants and non-governmental organisations have not found a field for action or government support to carry out educational actions that could contribute to a change in the current scenario.

The COVID-19 pandemic aggravates the economic crisis, widening social inequalities and making it difficult for many Brazilians to insert the Circular Economy as a relevant agenda. In a post-pandemic scenario, the resumption of economic growth must be based on the generation of green jobs, especially in efforts to close the production cycle through alternatives such as reuse, reconditioning and recycling. Figure 3 shows the relative balance between responses about popular pressure and their ability to change towards EC.

Among the interviewees who believe that there is demand from society, some perceive it as strong or weak, albeit growing. As an argument for those who judge the pressure as weak, some claim a lack of qualified monitoring of social participation. In contrast, others report the existence of a portion of consumers who will always

prioritize the price criterion and even report the existence of virtual environmental militancy, which (still) does not bother to the point of generating significant changes.

Figure 3 – Distribution of opinion of respondents on normative isomorphism



Source: Own elaboration with help from Canva.com

To exemplify the findings above, two excerpts were extracted from the speech of respondents who believe there is a small but growing demand. One of the statements that highlight this position is that of a specialist from a company that works with Reverse Logistics for packaging, intermediating the work of cooperatives and industries in São Paulo (EMP4).

EMP4: “we have this issue of engagement on Instagram, the internet nowadays has been acting a lot in this sense, of criticising brands. Anything goes viral, it becomes the subject of endless debates.”

There are also those interviewed who believe that organisations are under pressure from the population in Brazil to expand their Circular Economy actions. The speech of the representatives of this category normally contained the excessive exposure that the brand suffers for being exposed in the packaging, emphasising the important work of non-governmental organisations and state inspection agencies.

In this sense, after a literature review with 85 articles on the sustainable supply chain in developing countries, Jia et al. (2018) state that pressures from external stakeholders are the motivators (drivers) of changes in the chain. The same authors also argue that part of the concern with issues related to sustainability in the supply chain concerns the fear that these companies have of damaging their reputation, especially multinational companies (Jia et al., 2018).

Two excerpts illustrate the reflections explained above, taken from the following interviewees: 1) ESP2, Member of the Management Committee of the Circular Economy Centre (NEC) and 2) EMP7, Environmental analyst at a paper, cardboard and multilayer bag packaging factory.

ESP2: "Why is there so much pressure from society in the packaging sector? Because that's where you have the polluter pay responsibility. Because that's where you can see the brand, if I see a cigarette butt in Guanabara Bay, I know whose it is. As the packaging comes with a label, an identity, and your brand is there, this sector feels much more pressure than the energy sector, for example."

EMP7: "This is perhaps as important a pressure as inspection by environmental agencies. After all, this interferes with the company's revenue. We answer many sustainability questionnaires, our customers charge us for these measures. Our packaging needs to be traceable more and more, and this comes from charging customers."

Therefore, regarding this mechanism of institutional change (normative isomorphism), the opinions of the interviewees differ: part believes there is no significant pressure from society for CE actions. The absence of societal pressure distances the country from the last stage of institutionalisation, and the so-called sedimentation (Tolbert & Zucker, 1999) would make environmental awareness more popular.

In contrast, another part believes there is no pressure but perceives its increase. On the other hand, some perceive the existence of a small and growing pressure, and, finally, a portion of the interviewees believe that the pressure is not only tremendous but also increasing.

The pressure for more professional projects and programs, with managers and workers concerned with the continuous improvement of their processes and products, in the Brazilian packaging chain, is perceived by the minority of respondents. Therefore, in this case, normative isomorphism will come from collective awareness and consequent pressure from society. As such, unspoken norms and behaviour patterns are expected to shift towards a more regenerative and restorative economy.

5 FINAL REMARKS

Solid waste management continues to be full of operational and logistical challenges, such as the low rates of recovery and recycling of materials and the numerous dumps and controlled landfills still in the entire operation. The Circular Economy proposes a new way of doing business, respecting principles that contribute to closing the production cycle and extending the useful life of products. Therefore, this research aimed to analyse normative isomorphism as a mechanism for institutional change and its ability to contribute to the institutionalisation of the Circular Economy in the packaging market in Brazil.

With the snowball sampling technique, 53 (fifty-three) professionals who work directly or indirectly in this chain participated in in-depth semi-structured interviews. After transcribing the interviews, the thematic categorical content analysis was carried out supported by NVivo software.

As managerial contributions, it is worth mentioning the main insights generated by this research regarding the pressure from society for more professional projects in the Circular Economy of packaging (normative pressure):

1) There is a contradictory situation because at the same time that the economy cries out and encourages millions of people to consume avidly, environmentalists ask that consumption be conscious;

2) In Brazil, pressure for socio-environmental improvements in products is concentrated on a portion of the population. Most people focus on economic issues and therefore distance themselves from discussions qualified enough to push for change;

3) Non-Governmental Organisations (NGOs) and supervisory bodies play a fundamental role in directly demanding that laws be complied with and in encouraging and instructing civil society on how to participate and/or monitor the execution of public policies.

Despite not being among this article's objectives, the various barriers to implementing the National Solid Waste Policy (PNRS) were raised when surveying respondents' opinions on environmental legislation. Equally unintentionally, the benefits of adopting circular practices were introduced when raising the idea of isomorphism. It indicates possibilities for future research to deepen these points.

Academic contributions can also be drawn from this research. After all, it contributes to filling gaps identified in the literature, such as Circular Economy studies investigating the dynamics of stakeholders and applied research in Brazil to raise current opportunities and challenges. In addition, researchers can use the thematic categories created here (from the literature and the actors' speech) to apply to other case studies in different regions on the same theme.

This research has limitations regarding the sector studied (packaging in general), locus (Brazil) and theoretical lens used (Institutional Theory). These methodological limitations prevent the generalisation of the results; after all, other sectors may result in different findings from the perspective of other theories. The research also used a qualitative approach, and its data collection techniques limited the results in light of the perceptions/opinions of the interviewees.

Finally, future research is suggested to continue investigating the reverse logistics of packaging in Brazil. After all, the legislation has undergone recent transformations, to list at least two at the federal level: Decree nº 11.043/22 approves the National Solid Waste Plan (Planares) and Decree nº 11.413/23 establishes the reverse logistics recycling credit certificate, among other measures. These decrees can represent progress on the path toward operations management aligned with the principles of the Circular Economy.

REFERENCES

- Abrampa (2020). Associação Brasileira dos Membros do Ministério Público de Meio Ambiente. *Nota Técnica da ABRAMPA: Sobre a proposta de Termo de Compromisso de grupo de empresas a ser celebrado com a União para fomento à Economia Circular e Logística Reversa de Embalagens em Geral.*
- Abuabara, L., Paucar-Caceres, A., & Burrowes-Cromwell, T. (2019). Consumers' values and behaviour in the Brazilian coffee-in-capsules market: promoting circular economy. *International Journal of Production Research*, 57(23), 7269–7288. <https://doi.org/10.1080/00207543.2019.1629664>
- Bai, C., Sarkis, J., Yin, F., & Dou, Y. (2020). Sustainable supply chain flexibility and its relationship to circular economy-target performance. *International Journal of Production Research*, 58(19), 5893-5910. <https://doi.org/10.1080/00207543.2019.1661532>
- Barbalho, F. A., & Medeiros, J. J. (2014). Transparência e legitimação de objetivos institucionais em empresas estatais: um estudo de caso sobre a Petrobras. *Cadernos EBAPE.BR*, 12(1), 469-493. <https://doi.org/10.1590/1679-39519107>
- Bardin, L. (2011). *Análise de Conteúdo*. Edições 70.
- Besharov, M. L., & Khurana, R. (2012). Leading amidst competing technical and institutional demands: Revisiting selznick's conception of leadership. *Research in the Sociology of Organizations*, 44(1), 53-88. <https://doi.org/10.1108/S0733-558X20150000044004>
- Bressanelli, G., Perona, M., & Sacconi, N. (2019). Challenges in supply chain redesign for the Circular Economy: a literature review and a multiple case study. *International Journal of Production Research*, 57(23), 7395–7422. <https://doi.org/10.1080/00207543.2018.1542176>
- Carter, C., & Easton, P. (2011). Sustainable supply chain management: Evolution and future directions. *International Journal of Physical Distribution and Logistics Management*, 41(1), 46–62. <https://doi.org/10.1108/09600031111101420>
- Cerqueira-Streit, J. A., Endo, G. Y., Guarnieri, P., & Batista, L. (2021). Sustainable Supply Chain Management in the Route for a Circular Economy : An Integrative Literature Review. *Logistics*, 5(81), 1-21. <https://doi.org/10.3390/logistics5040081>
- Dimaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited : Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147-160. <https://doi.org/10.2307/2095101>
- EMF, Ellen MacArthur Foundation. Towards the Circular Economy. (2013). Vol. 1: Economic and business rationale for an accelerated transition. *Ellen Macarthur Foundation*, 1(1), 1-96. <https://doi.org/10.1162/108819806775545321>

- Fung, Y. N., Choi, T. M., & Liu, R. (2019). Sustainable planning strategies in supply chain systems: proposal and applications with a real case study in fashion. *Production Planning and Control*, 31(12), 883–902. <https://doi.org/10.1080/09537287.2019.1695913>
- Fuss, M., Barros, R. T. V., & Poganietz, W. R. (2021). The role of a socio-integrated recycling system in implementing a circular economy – The case of Belo Horizonte, Brazil. *Waste Management*, 121(1), 215–225. <https://doi.org/10.1016/j.wasman.2020.12.006>
- Genovese, A., Acquaye, A., Figueroa, A., & Koh, L. (2017). Sustainable supply chain management and the transition towards a circular economy: Evidence and some applications. *Omega*, 66(1), 344–357. <https://doi.org/10.1016/j.omega.2015.05.015>
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, 114(1), 11–32. <https://doi.org/10.1016/j.jclepro.2015.09.007>
- Greer, R., Von Wirth, T., & Loorbach, D. (2021). The Waste-Resource Paradox: Practical dilemmas and societal implications in the transition to a circular economy. *Journal of Cleaner Production*, 303, 126831. <https://doi.org/10.1016/j.jclepro.2021.126831>
- Hassini, E., Surti, C., & Searcy, C. (2012). A literature review and a case study of sustainable supply chains with a focus on metrics. *International Journal of Production Economics*, 140(1), 69–82. <https://doi.org/10.1016/j.ijpe.2012.01.042>
- Homrich, A. S., Galvão, G., Abadia, L. G., & Carvalho, M. M. (2018). The circular economy umbrella: Trends and gaps on integrating pathways. *Journal of Cleaner Production*, v. 175(11), 525–543. <https://doi.org/10.1016/j.jclepro.2017.11.064>
- Hussain, M., & Malik, M. (2020). Organizational enablers for circular economy in the context of sustainable supply chain management. *Journal of Cleaner Production*, 256, 120375. <https://doi.org/10.1016/j.jclepro.2020.120375>
- Jia, F., Zuluaga-Cardona, L., Bailey, A., & Rueda, X. (2018). Sustainable supply chain management in developing countries: An analysis of the literature. *Journal of Cleaner Production*, 189(1), 263–278. <https://doi.org/10.1016/j.jclepro.2018.03.248>
- Melo, M. F. (2016). ONGS e relações institucionais: primeiro, segundo e terceiro setores. *Ciências Sociais Unisinos*, 52(1), 88–99. <https://doi.org/10.4013/csu.2016.52.1.11>
- Meyer, J., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. In *American journal of sociology*, 83(2), 340–363.
- Miles, M., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook*, Vol. 2. SAGE Publications.
- Misoczky, M. C. (2005). O isomorfismo normativo e a análise de organizações de saúde. *RAE Eletrônica*, 4, (1). <https://doi.org/10.1590/s1676-56482005000100009>

- MPPR, Ministério Público do Paraná. (2022). *Terceiro Setor - Perguntas frequentes - Centro de Apoio Operacional das Promotorias das Fundações e do Terceiro Setor*. Disponível em: <https://fundacoes.mppr.mp.br/modules/conteudo/conteudo.php?conteudo=118>. Acessado em: 20 de julho de 2022.
- Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology*, 11(4), 327–344. <https://doi.org/10.1080/13645570701401305>
- Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, 18(9), 697–713. [https://doi.org/10.1002/\(SICI\)1097-0266\(199710\)18:9<697::AID-SMJ909>3.0.CO;2-C](https://doi.org/10.1002/(SICI)1097-0266(199710)18:9<697::AID-SMJ909>3.0.CO;2-C)
- Park, J., Sarkis, J., & Wu, Z. (2010). Creating integrated business and environmental value within the context of China's circular economy and ecological modernization. *Journal of Cleaner Production*, 18(15), 1494–1501. <https://doi.org/10.1016/j.jclepro.2010.06.001>
- Peci, A., Vieira, M. M. F., & Clegg, S. R. (2006). A construção do “Real” e práticas discursivas: o poder nos processos de institucionaliz(ação). *Revista de Administração Contemporânea*, 10(3), 51–71. <https://doi.org/10.1590/s1415-65552006000300004>
- Rauch, E., Dallinger, M., Dallasega, P., & Matt, D. T. (2015). Sustainability in manufacturing through distributed manufacturing systems (DMS). *Procedia CIRP*, 29, 544–549. <https://doi.org/10.1016/j.procir.2015.01.069>
- Saldanha, G., & O'Brien, S. (2014). Research methodologies in translation studies. In *Routledge*, v. 4. <https://doi.org/10.1080/0907676x.2015.1109906>
- Silva, N. E. F., Coelho, P. F., & Cavalcante, C. E. (2016). Isomorfismo e sustentabilidade: análise nas empresas do setor elétrico brasileiro. *Exacta*, 14(2), 251–268. <https://doi.org/10.5585/exactaep.v14n2.6229>
- Silveira, R. M. (2021). *Caminhos da inclusão social à luz da política nacional de resíduos sólidos*. 1 ed. Rio de Janeiro: Letra Capital.
- Stacey, J., & Rittberger, B. (2003). Dynamics of formal and informal institutional change in the EU. *Journal of European Public Policy*, 10(6), 858–883. <https://doi.org/10.1080/1350176032000148342>
- Storopoli, J., Ramos, H., Quirino, G., & Rufin, C. (2019). Themes and methods in sustainability research. *Revista de Gestão Ambiental e Sustentabilidade*, 8(3), 410–430. <https://doi.org/10.5585/geas.v8i3.15731>
- Tolbert, P. S., & Zucker, L. G. (1999). The Institutionalization of Institutional Theory. *Studying Organization: Theory & Method*, 1, 169–184. <https://doi.org/10.4135/9781446218556.n6>
- United Nations. (2021). Glasgow Climate Pact. Decision / Conference of the Parties. n. 26.

- Wiesmeth, H., Shavgulidze, N., & Tevzadze, N. (2018). Environmental policies for drinks packaging in Georgia: A mini-review of EPR policies with a focus on incentive compatibility. *Waste Management & Research*, 36(11), 1004–1015.
- Winkler, H. (2011). Closed-loop production systems - A sustainable supply chain approach. *CIRP Journal of Manufacturing Science and Technology*, 4(3), 243–246. <https://doi.org/10.1016/j.cirpj.2011.05.001>
- Xiao, X., & Zeng, H. (2017). Sustainable supply chain management and circular economy capability: Based on the perspective of institutional pressure. *System Engineering Theory and Practice*, 37(7), 1793-1804. 10.12011/1000-6788(2017)07-1793-12
- Yin, R. K. (2015). *Estudo de Caso: Planejamento e Métodos*. 5 ed. Porto Alegre: Bookman.
- Zucker, L. G. (1983). Organizations as institutions. *Research in the Sociology of Organizations*, 2(1), 1–47. <https://doi.org/10.2307/2075478>

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1. Definition of research problem	√	√		
2. Development of hypotheses or research questions (empirical studies)	√	√		
3. Development of theoretical propositions (theoretical work)	√	√		
4. Theoretical foundation / Literature review	√			
5. Definition of methodological procedures	√	√		
6. Data collection	√			
7. Statistical analysis	√			
8. Analysis and interpretation of data	√			
9. Critical revision of the manuscript		√	√	√
10. Manuscript writing	√		√	√

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