

## The influence of institutional isomorphism on budget acceptance mediated by the purposes of planning and dialogue

*Influência do isomorfismo institucional na aceitação do orçamento mediada pelas finalidades de planejamento e diálogo*

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### Keywords

Budget purposes.  
Budget acceptance.  
Institutional theory.  
Institutional isomorphism.

### Palavras-chave

Finalidades do orçamento.  
Aceitação do orçamento.  
Teoria Institucional.  
Isomorfismo institucional.

### Abstract

This study seeks to examine the influence of institutional isomorphism on budget acceptance, mediated by the artifact's purposes. We conducted a survey of company managers in the pharmaceutical sector linked to the Pharmacy Guide with a sample of 147 valid responses. We used structured equation modeling for partial least squares to analyze the data and test the hypotheses. The results indicate that coercive, imitative and normative factors of the environment lead to greater use of the artifact within the studied context. They also indicate a significant positive relationship between planning purposes and the strategic acceptance response. Institutional isomorphism also presented a significant positive influence on the budget's acceptance. There was also partial mediation of the budget's purposes in relation to institutional isomorphism and the strategic acceptance response. It may be inferred that greater acceptance is relevant, in addition to using the artifact to respond to institutional pressure, to making the budget's purposes useful in the company's everyday activities. As a contribution to theory, this study reinforces the complementarity between the proposals of institutional isomorphism of DiMaggio and Powell (1983) and the strategic response model proposed by Oliver (1991), applying this model to the budget literature. It also includes budget purposes as a mediating variable in the relationship between institutional isomorphism and budget acceptance.

### Resumo

O estudo teve como objetivo examinar a influência do isomorfismo institucional na aceitação do orçamento, mediada pelas finalidades do artefato. Realizou-se uma survey com gerentes das empresas do setor farmacêutico vinculadas ao Guia da Farmácia com amostra de 147 respostas válidas. Para a análise de dados e teste de hipóteses foi utilizada a Modelagem de Equações Estruturais pelos mínimos quadrados parciais. Os resultados apontam que os fatores coercitivos, miméticos e normativos advindos do ambiente levam a uma maior utilidade do artefato no contexto estudado. Aponta-se também para a influência positiva e significativa das finalidades de planejamento e a resposta estratégica de aceitação. O isomorfismo institucional ainda apresentou influência positiva e significativa na aceitação do orçamento. Encontrou-se ainda a mediação parcial das finalidades do orçamento na relação entre isomorfismo institucional e a resposta estratégica de aceitação. Infere-se que para uma maior aceitação faz-se relevante, além de utilizar o artefato para responder as pressões institucionais, dar utilidade às finalidades do orçamento nas atividades cotidianas da empresa. Como contribuições a teoria, o estudo reforça a complementaridade entre as proposições de isomorfismo institucional de DiMaggio e Powell (1983) e o modelo de respostas estratégicas propostas por Oliver (1991), trazendo a utilização do modelo para a literatura orçamentária. Aponta-se também a inclusão das finalidades do orçamento como variável mediadora na relação entre o isomorfismo institucional e a aceitação do orçamento.

### Article information

Received: August 24, 2020  
Approved: November 13, 2020  
Published: May 17, 2021

### Practical Implications

The results indicate that it is not enough for companies to use the budget as a response to institutional pressure, such as the presented regulation of the pharmaceutical sector, but managers should also emphasize the utility of the budget's purposes, because a greater emphasis on its purposes can lead to greater acceptance on the part of those involved.

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## 1 INTRODUCTION

The managerial accounting literature offers several reasons for preparing organizational budgets, including the coordination and control of activities, the allocation of resources, planning, the communication of goals, performance evaluations, and strategy formation and implementation (Covaleski, Evans, Luft & Shields, 2003; Hansen & Van der Stede, 2004; Hansen, Otley & Van der Stede, 2003; Otley, 1999).

The budget can also be used as a tool to raise awareness and motivate everyone involved, as the latest studies have argued (Ekholm & Wallin, 2011; Hansen & Van der Stede, 2004; Mucci, Frezatti & Dieng, 2016). There are various studies of the structuring and institutionalization of budgets linked to these factors, and there is an extensive literature which argues in favor of stimulating this behavior (Libby & Lindsay, 2010).

In addition, it is important to consider that the budget does not operate in an isolated manner, but should be studied as part of an organizational package in which the environment in which it is created, which is often turbulent, should be considered (Hansen et al., 2003). Within this context, this area has developed research based on sociology known as Institutional Theory (Covaleski et al., 2003) to encompass the budget and the organizational environment, which is based on the assumption that organizations influence and are influenced by the pressures of the context in which they operate (Meyer & Rowan, 1977).

This pressure force organizations to make changes in their institutional logic, making them more homogenous. This process is called institutional isomorphism and it is influenced by market and legislative factors as well as technological advances (DiMaggio & Powell, 1983; Tolbert & Zucker, 1999). These changes occur in order to meet a set of expectations seeking to obtain legitimacy within their environment (Meyer & Rowan, 1977).

The Institutional Theory literature based on institutional isomorphism offers various insights related to the relationship between organizations, environments and the way in which they react to institutional processes, calling attention to their external impacts. However, Oliver (1991) reminds us that institutional theories tend to limit their attention to institutional effects ranging from structural conformity to institutional isomorphism, and tend to ignore factors which lead to the acceptance or lack of acceptance of those involved in the relationships between the organization and the environment.

This acceptance can vary in accordance with the resistance of those involved and takes into consideration organizational myths, meanings and values in trying to investigate organizational behavior within the context of external pressure (Oliver, 1991). Thus, there is a need to explore how institutional isomorphism influences acceptance, which is still an incipient theme in terms of managerial artifacts as pointed out by Wijethilake et al. (2017).

In parallel to these studies which explore institutional isomorphism, some budget studies have focused on the purposes for this artifact that have been presented to organizations. These works begin with the argument that organizations have different potential reasons for using budgets, and even though they are not totally independent, they are sufficiently different to justify separate analyses (Hansen & Van der Stede, 2004).

Institutional isomorphism as well as budget purposes can vary depending on the peculiarities of each sector and may also affect the vision of those involved in the budget. In this scenario, one sector that stands out is the Brazilian pharmaceutical sector, due to the growing investment of international firms, price controls enforced by the Medication Market Regulation Chamber (CMED), and the growing revenues in recent quarters, which are factors that can lead to institutional change (Pereira & Gomes, 2017; Sindusfarma, 2018). The sector may suffer from institutional isomorphism, given that it is under the coercive pressure of economic regulation and price controls, which imitate national and international competition and the norms of increasingly specialized professionals (Gomes, Pimentel, Cardoso & Pieroni, 2014; Sindusfarma, 2018). All of these peculiarities can affect an organization's budget and its purposes (Brandau, Endenich, Trapp & Hoffjan, 2013).

Despite all of this sector's peculiarities, the budget literature of the pharmaceutical industry is still incipient (Pereira & Gomes, 2017). A study by Hansen and Van der Stede (2004) points out that more research is necessary to understand how organizations deal with their portfolio of budget purposes, and in terms of this point the concept of acceptance proposed by Oliver (1991) can help understand the context, even for more complex environments (Covaleski et al., 2003) such as the pharmaceutical sector.

Within this context, the following research question arises: What is the influence of institutional isomorphism in budget acceptance, mediated by the artifact's purposes? The objective of this study is to examine the influence of institutional isomorphism on budget acceptance, mediated by the artifact's purposes. To respond to the proposed objective, we have conducted a survey with operational managers in pharmaceutical sector firms.

This study contributes to the discussion of institutional isomorphism based on the complexities presented by the studied sector. The pharmaceutical sector is regulated by the government in terms of price controls, social pressure, and economic regulation, and is driven by external capital, which represents forty percent of the Brazilian market (PWC, 2018; Sindusfarma, 2018), and these are all factors that lead to a greater coercive isomorphism.

In addition, the sector has presented revenue growth which has increased above the national average in recent quarters, driven by the stimulation of local production, innovation, and the adoption of public access to medication policies (PWC, 2018; Sindusfarma, 2018). These peculiarities lead these organizations to have greater uncertainty within the organizational environment, the mechanism of imitative isomorphism (DiMaggio & Powell, 1983), which requires greater professionalization on the part of those involved in the process, and which leads to normative isomorphism (DiMaggio & Powell, 1983). This may be added to the lack of evidence presented regarding the studied context (Pereira & Gomes, 2017).

## 2 THEORETICAL FOUNDATION

### 2.1 Strategic responses to institutional isomorphism

New Institutional Sociology seeks to explore why organizations in similar situations become similar due to socially institutionalized contexts and procedures (Meyer & Rowan, 1977). This process is due to actions of the organizational context, which is moved by forces outside the organization which lead to the homogenization of organizations (DiMaggio & Powell, 1983; & Zucker, 1999).

Homogenization is called isomorphism and comes from three types of mechanisms which lead to institutional change, coercive, imitative and normative. This classification is not always distinct empirically, but tends to be derived from different conditions (DiMaggio & Powell, 1983, Judge, Li & Pinsker, 2010; Brandau, Hoffjan & Wömpener, 2014; Ozdil & Hoque, 2017)

In examining the process of homogenization, Oliver (1991) argues that the agents involved in the institutionalization process do not always display passive behavior in relation to institutions and their responses depend on predictive factors of institutional pressure.

The author proposes a model of strategic responses to institutional pressure, envisioning variation in the dimensions of organizational behavior. Oliver (1991) establishes the conceptual basis for identifying strategies that can lead to acceptance in response to the institutional environment. Oliver (1991) argues that acceptance is when an organization submits to institutional pressure in a passive manner. This is more probable when the organization's institutional interests, values and logic are in accordance with the pressure, or when it is motivated by the interests of a company with greater legitimacy (Guerreiro, Rodrigues & Craig, 2012). The response is divided into getting accustomed to, imitating and accepting.

Getting accustomed to refers to unconscious adhesion to rules and/or values taken to be correct, in this case, institutional norms which have in fact a social character and are understood as the reality of the company, and with this an organization may not be aware of institutional influences, and therefore, does not respond in strategic manner. Imitating is related to a conscious or unconscious reproduction of the institutional models of another organization which is enjoying success in a process of imitative isomorphism. Acceptance is defined as conscious obedience or the incorporation of values, norms or institutional requirements (Oliver, 1991).

The author argues that the agents involved in the institutionalization process do not always exhibit passive behavior, and acceptance depends on predictive factors of institutional pressures such as: cause, agents, content, control and context.

Based on the listed predictive factors, Frezatti et al. (2007) point out that some propositions can be made in terms of the artifact institutionalization process of the managerial control system, which like the budget, is related to external pressure, and as a result, institutional isomorphism. Guerreiro et al. (2010) investigate determinants which may be able to help institutionalization, including changes in institutionalization, evidence from other units, and the use of consultants, which are factors indicated by DiMaggio and Powell (1983) which lead to coercive, imitative and normative isomorphism respectively.

## 2.2 Budget purposes

The budget has traditionally been the central control platform for most organizations, given that it is one of the few techniques capable of integrating planning, control and evaluation activities in a single coherent summary (Libby & Lindsay, 2010; Otley, 1999). Despite its extensive utilization and popularity, the literature presents critiques of its use, even though it is perceived to be an aggregator of value (Libby & Lindsay, 2010).

In seeking better understanding, studies have sought various budget purposes for organizations, instead of concentrating on just one budget dimension (Hansen & Van der Stede, 2004). In relation to this, the literature points out that the acceptance of the budget can vary in accordance with the budget's purposes (Hansen & Van der Stede, 2004).

This idea of multiple purposes for budgets in organizations is not new and has been explored by the managerial literature (Hansen & Van der Stede, 2004). Studies along these lines present many potential sources to create a list of reasons for the performance of budget practices in organizations. Each author elaborates a different list of purposes for a budget and it is not possible to determine which of these lists best represents the studied reality (Hansen & Van der Stede, 2004).

Within this scope, Ekholm and Wallin's study (2011) tested whether flexible budgets are better than annual fixed budgets. In terms of budget purposes, the authors divided them into Planning and Dialogue. The purpose of planning refers to the planning of organizational strategies and is linked with coordination, the allocation of resources, and the determination of organizational volumes (Ekholm & Wallin, 2011; Mucci et al., 2016). The purpose of dialogue refers to communication, the creation of awareness and the motivation of those involved (Ekholm & Wallin, 2011; Mucci et al., 2016).

These purposes are not totally independent of each other, do not have static dimensions, and form a dynamic process within the managerial controls of companies (Mucci et al., 2016). Mucci et al.'s study (2016) in exploring two dimensions, found that planning and dialogue influence management's perception of utility and its decision making.

## 2.3 Research hypotheses

Studies have found that institutional pressure that leads to isomorphism affects how organizations use the budget and the use of the artifact (Amans et al., 2015; Ozdil & Hoque, 2017). With this, it is expected that institutional isomorphism positively influences the purposes of the budget.

Brandau et al.'s study (2013) found that managerial accounting practices are converging towards the same standards due to pressure from the three pillars of isomorphism, and the results are reinforced by Brandau et al. (2014). In the studied companies, managerial accounting practices are being implemented as a consequence of isomorphism, increasing the importance of the utilized artifacts.

Amans et al.'s study (2015) in investigating French scenic art organizations financed by public partnerships, found that institutional pressure, based mainly on the coercive isomorphism of public partnerships, ensure that budgets are used in a more effective manner, furthering the purposes of the artifact.

The findings of Ozdil and Hoque (2017) point out the major use of the budget as a response to coercive isomorphism and the search for efficiency. The literature still presents the influence of imitative (Oyadomari et al., 2008) and normative (Russo, Parisi & Pereira, 2016) isomorphism in the adoption and importance of other managerial artifacts. Based on their findings we will elaborate hypothesis 1:

**H<sub>1</sub>:** Institutional isomorphism positively influences the purposes of the budget

Besides the institutional isomorphism suffered by the budget, it can present different purposes within the same context (Ekholm & Wallin, 2011; Hansen & Van der Stede, 2004; Kihn, 2011; Mucci et al., 2016). Hansen & Van der Stede (2004) point out that these budget purposes are not totally independent and are interrelated. This idea is complemented by Kihn (2011), who argues in favor of budgets with *ex ante* and *ex post* purposes.

*Ex ante* budget purposes are used for information and planning in alignment with organizational strategies. *Ex post* budget purposes, in turn, are linked to dialogue with those involved in the process after the defined planning (Kihn, 2011).

Since the empirical results indicate that planning purposes precede dialogue purposes (Ekholm & Wallin, 2011; Mucci et al., 2016), it is expected that when planning purposes are perceived to be useful, dialogue purposes will also prove useful. Thus, we can propose hypothesis 2:

**H<sub>2</sub>:** Planning purposes positively influence dialogue purposes

Studies also indicate that budget purposes affect the vision of those involved with the artifact (Arnold & Gillenkirch, 2015; Mucci et al., 2016; Sivabalan et al., 2009). Hansen & Van der Stede (2004), in analyzing four budget purposes, found a significant positive relationship between the importance of purposes and the overall satisfaction of all those involved. These results were also found by Piccolli, Warken, Lavarda, Mazzioni and Silva Carpes (2014).

Mucci et al. (2016) have found a positive association between planning and dialogue purposes and the perception of budget usefulness and relevance when studying a single company. Studies indicate that there is a relationship between the usefulness of purposes and the positive perceptions of the artifact in companies. Oliver (1991) also points out that there is a strategic response of acceptance which is more probable when it is motivated by company interests, in this case by overall satisfaction, utility and perceived relevance. With this, according to hypothesis 3, it is expected that the utility of budget purposes positively influences the strategic response of acceptance.

**H<sub>3</sub>:** Budget purposes positively influence the strategic response of acceptance

In addition, the literature points to a relationship between institutional isomorphism, divided into coercive, imitative and normative, and the strategic response of acceptance (Oliver, 1991). Coercive isomorphism is the result of formal and informal pressure exercised on organizations, and it is linked to dependence on other entities and the search for legitimacy (DiMaggio & Powell, 1983). Both are predictive factors for the strategic responses mentioned by Oliver (1991) which are linked respectively to agents and causes.

In addition to coercive pressure, another mentioned factor that leads to institutional isomorphism, in this case imitative isomorphism, is uncertainty in the environment which makes companies seek solutions from other established companies. Uncertainty in this context is a predictive factor mentioned by Oliver (1991). Finally, professionalization, which leads to normative isomorphism, seeks greater integration among professionals, generating a consolidated base of work. This is another predictive factor listed by Oliver (1991) which is linked to this context.

According to Oliver (1991), the predictive factors linked to institutional isomorphism, dependence, legitimacy, uncertainty and integration tend to lead to a more passive strategic strategy of acceptance of the established institutional norms. The results of other contexts also point to the influence of institutional isomorphism in the strategic response of acceptance (Santos et al, 2017). In this manner, it is expected that institutional isomorphism has a positive relationship to the strategic response of acceptance. Thus, we have elaborated hypothesis 4:

**H<sub>4</sub>:** Institutional isomorphism positively influences the strategic response of acceptance

As the literature has presented, the mechanisms of coercive, seeking dependence and legitimacy (Amans et al., 2015; Ozdil & Hoque, 2017), imitative, in response to uncertainty in the environment (Oyadomari et al., 2008), and normative, based on professionalization (Russo et al., 2016), have influenced the utility and importance given to managerial artifacts by organizations, as is expected in Hypothesis 1.

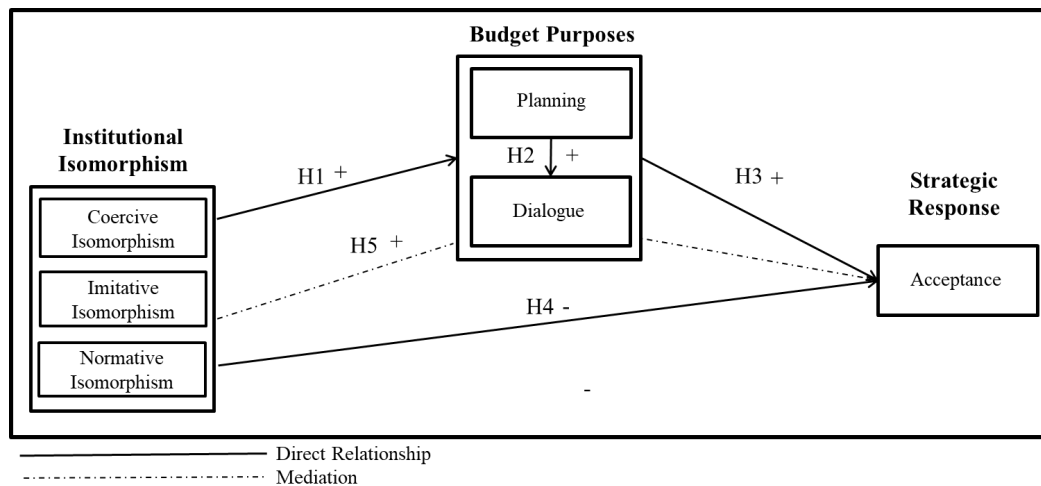
Furthermore, the utility of budget purposes has influenced the greater satisfaction of those involved (Hansen & Van der Stede, 2004, Mucci et al., 2016) inducing greater acceptance, as expected in Hypothesis 3. In addition, it is expected that institutional isomorphism positively influences the strategic response of budget acceptance, as it does in other contexts, as predicted by Hypothesis 4.

In this juncture, it is expected that institutional isomorphism increases the utility of budget purposes and thus influences the strategic response of acceptance, which are the purposes used to explain the relationship between isomorphism and acceptance. We point out, based on this context, that budget purposes can mediate the relationship between institutional isomorphism and the strategic response of acceptance. Given this, we can elaborate hypothesis 5:

**H<sub>5</sub>:** Institutional isomorphism positively influences the strategic response of acceptance mediated by budget purposes

With the hypotheses formulated, we can elaborate the study's theoretical model which is presented in Figure 1.





**Figure 1.** Theoretical model

Source: prepared by the authors.

With the hypotheses to be tested and the study's theoretical model, we will now cover the study's methodological procedures.

### 3 METHODOLOGICAL PROCEDURES

This study can be characterized as a descriptive quantitative survey (Martins & Theóphilo, 2009). The selected population was 121 companies linked to the Pharmacy Guide whose main activity is in the pharmaceutical sector, and the professionals selected were the operational managers. The data was collected through the LinkedIn network through a questionnaire made available through the Google Forms platform and the final sample consisted of 147 valid responses.

This research construct was developed based on the literature. In terms of institutional isomorphism, we used the assumptions of DiMaggio and Powell (1983). Concerning the strategic response of acceptance, we used the assumptions of Oliver's acquiescing to a strategic model (1991). Finally, the purposes of budget planning and dialogue were based on the studies of Ekholm and Wallin (2011) and Mucci et al. (2016). The statements were elaborated and presented to the respondents using a five-point Likert type scale.

The research questionnaire went through validation steps, first with researchers in the budget and institutionalization areas seeking their contributions in terms of the constructs. Next, we consulted managers from other areas to achieve clearer statements.

The data collection took place from September 26, 2018 to November 16, 2018. After the collection and tabulation of the data, we performed our first step of validation and reliability. First, we validated the constructs with exploratory factor analysis, using the criteria of (i) Correlation matrix analysis (ii) Commonality analysis ( $H^2$ ); (iii) the Kaiser-Meyer-Olkin (KMO) test; (iv) Bartlett's sphericity test; (v) the Anti-image matrix (AIM); and (vi) Cronbach's Alpha to determine the internal reliability of the constructs (Fávero, 2017; Hair Jr, Hult, Ringle & Sarstedt, 2014). Next, we evaluated the validity and reliability of the measurement model through analysis of: Average Variance Extracted (AVE) and internal consistency through Cronbach's Alpha (CA) and Composite Reliability (CR) (Hair Jr. et al., 2014; Ringle, Silva & Bido, 2014).

After the validation process, the results were analyzed using structural equation modeling and partial least squares (PLS-SEM) (Ringle et al., 2014). To test the hypotheses and the analysis of the significance of the relationships (p-values), we used the Bootstrapping procedure (Ringle et al., 2014). For the mediation, we used the mediation criteria established by Baron and Kenny (1986). To execute and present this step we used Microsoft Excel, SPSS Statistics and SmartPLS.

## 4 PRESENTATION AND DISCUSSION OF THE RESULTS

### 4.1 Profile of the respondents

As described in the methodology, this study received 150 responses, and in these step three responses were excluded because the respondents did not hold operational manager positions, which gave us a total of 147 valid responses. In this step we verified that there was not a polarization of managers of the same company, because we compared the size of each company and the number of employees. We verified that there were not many responses from managers from the same company, which contributed to a better understanding of the studied population.

We solicited their area of operations, their functions and their academic training. The sample contains functions closer to the budget, such as financial managers and accounting managers, and functions little related to the managerial artifact, such as medical managers and quality managers.

Finally, we asked managers whether they participate in any step of the elaboration of the budget. Most of the respondents participate during some step of the elaboration of the budget. We realized an inclusion test of the participatory control variable to verify possible differences in the strategic responses of participating and non-participating managers and did not find significant differences between these two groups.

### 4.2 Test of the hypotheses

After validating the measurement model, we verified the  $R^2$  (Pearson relationship coefficient) of each construct, which indicates how much of each dependent variable is explained by the independent variables.

**Table 1.** The Model's Pearson Determination Coefficients

Construct	$R^2$ - Mediation Model	$R^2$ - Mediation Model
Planning	There is none.	0.178
Dialogue	There is none.	0.372
Acceptance	0.124	0.162

Source: prepared by the authors.

Next, for the analysis of the significance of the structural model relationships, we used the Bootstrapping procedure (Ringle et al., 2014). We found significant positive relationships indicating a relationship between institutional isomorphism, budget purposes and the strategic response of acceptance. Table 2 presents the path coefficient and the significance of the relationships.

**Table 2.** Path coefficients and the significance of the relationships

H	Relationship	Structural coefficient	Standard error	t-value	p-value	Decision
H <sub>1</sub>	Institutional Isomorphism -> Planning	0.421	0.068	6.189	0.000	Accepted
	Institutional Isomorphism -> Dialogue	0.350	0.076	4.611	0.000	Accepted
H <sub>2</sub>	Planning -> Dialogue	0.374	0.084	4.462	0.000	Accepted
H <sub>3</sub>	Planning -> Acceptance	0.260	0.088	2.948	0.003	Accepted
	Dialogue -> Acceptance	-0.047	0.101	0.465	0.642	Partially
H <sub>4</sub>	Institutional Isomorphism -> Acceptance	0.353	0.067	5.244	0.000	Accepted

Source: prepared by the authors.

Hypotheses 1 and 2 were accepted, given that there is a significant positive relationship between institutional isomorphism and the budget purposes of planning and dialogue and between the utility of planning purposes and dialogue purposes. Hypothesis 3 was partially accepted, given that a significant positive relationship was found between planning purposes and the strategic response of acceptance. However, the relationship between dialogue purposes and the strategic response of acceptance was not only not significant, it had a negative coefficient, which was the opposite of what was expected. Hypothesis 4 was accepted, given that we found a significant positive relationship between institutional isomorphism and the strategic response of acceptance.

To analyze mediation, we used the criteria established by Baron and Kenny (1986): (i) the independent variable should significantly influence the mediator; (ii) the mediator should significantly influence the dependent variable; and (iii) the independent variable should significantly influence the dependent variable.

If the three criteria are met, to confirm the mediation of the effect of the independent variable on the dependent variable, the value of mediation should be less than the direct relationship, characterizing partial mediation. If the independent variable does not significantly influence the dependent variable after the inclusion of the mediating variables, we have total mediation (Baron & Kenny, 1986). Table 3 presents the direct relationships of the variables based on the Bootstrapping procedure and demonstrates the evaluation of mediation based on the comparison of the coefficients.

**Table 3.** Mediation evaluation

H	(P) Paths	Mod w/o Med.	Model with Mediation considering Budget Purposes						
		Effect	Direct Effect		Indirect Effect		Total Effect		Med. Effect
		Coef.	Coef.	%	Coef.	%	Coef.	p-value	%
H <sub>5</sub>	Institutional Isomorphism -> Purposes -> Acceptance	0.353	0.250	70.82	0.086	24.36	0.335	0.013	5.09
Acceptance of mediation			Partial						

Source: prepared by the authors.

The evaluation of the mediation presented a lower path coefficient in relation with institutional isomorphism and the strategic response of acceptance mediated by budget purposes in comparison with the model without mediation, meeting the established criteria and indicating a partial mediation between the variables.

### 4.3 Discussion of the results

The results enable us to affirm that Hypothesis 1 was accepted, which confirms previous studies (Amans et al., 2015; Oyadomari et al., 2008; Ozdil & Hoque, 2017; Russo et al., 2016). Most of the companies in the studied context have international capital (Sindusfarma, 2018), configuring a relationship of a headquarters with an affiliate, which is a factor that may lead managerial accounting to converge towards the same standards which increases its utility, according to previous studies (Brandau et al., 2013; Brandau et al., 2014). From this perspective, it is believed that peculiarities of isomorphism suffered by the pharmaceutical sector have influenced the utility associated with budget purposes.

We can also highlight the larger coefficient demonstrated for the purpose of planning (0.421) in comparison with the purpose of dialogue (0.350). Within the studied context those involved see the budget with greater utility in terms of the purposes linked to planning. They have a higher average and a lower standard deviation, compared with the utility of the purposes of dialogue, supporting results from other contexts (Hansen & Van der Stede, 2004; Mucci et al. 2016; Sivabalan et al., 2009).

We have verified that the utility of purposes of planning, presented a strong significant positive relationship with the utility of purposes of dialogue, in accordance with Hypothesis 2. With this, we can infer that purposes are not independent of each other, which corroborates previous studies (Ekholm & Wallin, 2011; Hansen & Van der Stede, 2004, Mucci et al., 2016).

We can also highlight the reaffirmation of the use of ex ante and ex post budget purposes, and the greater the utility of planning purposes are, the greater the utility of dialogue purposes are. The results are also in line with the studies of Ekholm and Wallin (2011) and Mucci et al. (2016).

It is suggested that managers who intend to stimulate the use of budgets as dialogue, for the communication of objectives, the raising of awareness, and motivation, should embrace and highlight the purposes of planning, which are aligned with the company's strategies, and these purposes are complementary and do not conflict.

This connection can also increase the performance of those involved, because, according to Gillenkirch (2015), when a single budget is used for more than one purpose, it can help in its comprehension. Mucci et al. (2016) also point out that joint purposes have a greater influence on the relevance of the instrument.



Hypothesis 3 was partially confirmed, given that we found a significant positive relationship only between the purposes of planning and the strategic response of acceptance, in line with Sivabalan et al. (2009).

It may also be inferred that the purposes of dialogue are not established in the studied context, and they are not related with the acceptance of the budget among those involved. The results also complement the findings of Hansen and Van der Stede (2004) and Piccoli et al. (2014) who found a greater relationship between the purpose of operational planning and overall satisfaction, and those of Mucci et al. (2016) who obtained a greater perception of utility for planning purposes. It is believed that the most established budget purposes can have a greater influence on acceptance and can also be related to overall satisfaction and the perception of utility, as found in previous studies.

Corroborating the assumptions of Oliver (1991), that predictive factors linked to institutional isomorphism lead to a response of acceptance, Hypothesis 4 was accepted. This result confirms the findings of other contexts, that greater institutional pressure leads those involved to greater acceptance of institutional norms (Santos et al., 2017), expressed in the budget.

The coercive characteristics present in the pharmaceutical sector are possible factors which explain the relationship of budget acceptance within the studied context. Summing up these factors, the sector presents an environment full of uncertainty, and as a result, the budget tends to be better accepted due to the experience of other companies in the sector and the role of consulting firms, as argued by Guerreiro et al. (2010).

We understand that our findings support previous studies, in which the utilization of the budget in the search for legitimacy (Ozdil & Hoque, 2017), in response to uncertainty (Oyadomari et al., 2008), and in demonstrating consistency in the use of best practices (Russo et al., 2016) and/or dependence in relation to a company's headquarters or other companies (Amans et al., 2015), can lead to better acceptance among those involved.

Finally, Hypothesis 5 was accepted, given that the criteria of Baron and Kenny (1986) were met. Since the direct relationship demonstrated significance between isomorphism and acceptance, we have a partial mediation of purposes. This finding indicates greater acceptance is relevant to effectively utilize the purposes of the budget, and that it is not used in just a ceremonial manner (Oyadomari et al. 2008).

We suggest that to achieve greater acceptance among those involved in the budget, it is not enough to use the artifact as a response to institutional pressure which leads to institutional isomorphism, and instead the utility of the artifact's purposes need to be emphasized.

## 5 FINAL CONSIDERATIONS

This study seeks to examine the influence of institutional isomorphism on the acceptance of the budget, mediated by the purposes of planning and dialogue, in companies of the pharmaceutical sector linked to the Pharmacy Guide, consisting of a sample of 147 operational managers and 121 companies.

We can conclude that there is a recognition of the purposes of the budget in the studied context of the institutionalization of the artifact, mainly in the functions of planning. Based on the presented coefficients, there is a dynamic process of institutional isomorphism which leads to greater utility of the purposes of the budget and a greater acceptance of it on the part of those involved. There is also mediation of the purposes of the budget in the acceptance of the instrument which presents a small percentage, which could be explained by the consolidation of the purposes of dialogue in these companies. This suggests that greater utilization of these purposes can lead to greater acceptance in response to the institutional isomorphism suffered by the instrument.

Based on this context, we can seek advances in its utilization, mainly by managers who have more responsibility related to communication with those directly involved in production. Greater institutionalization and consolidation of the purposes of dialogue, such as communication, motivation, and its institution as a base for remuneration can lead to a different vision on the part of those involved in the process.

This study's main contribution to the development of the budget literature is the inclusion of budget purposes as a mediating variable in the relationship between institutional isomorphism suffered by the artifact and the strategic responses of those involved. There are also indications that the use of the purposes of this managerial artifact can contribute to the institutionalization of the organizational context.

Based on our findings and the limitations of this study, we would like to present suggestions for future research. Additional studies can examine the areas of food and veterinary medicine, contemplating the complete pharmaceutical context. Furthermore, areas can be separated to verify whether the specificity of each reflects different factors in terms of institutional isomorphism and budget purposes.

Future studies can explore the reasons why the budget has not been used based on purposes of dialogue, and as an incentive for these purposes to reflect the responses of those involved in the artifact. Finally, we would further suggest the application of the proposed model to other sectors with different peculiarities for a better understanding of the findings of business practice and in order to strengthen budget theory.

## REFERENCES

- Amans, P., Mazars-Chapelon, A., & Villesèque-Dubus, F. (2015). Budgeting in institutional complexity: The case of performing arts organizations. *Management Accounting Research*, 27, 47-66. DOI: <https://doi.org/10.1016/j.mar.2015.03.001>
- Arnold, M. C., & Gillenkirch, R. M. (2015). Using negotiated budgets for planning and performance evaluation: an experimental study. *Accounting, organizations and society*, 43, 1-16. DOI: <https://doi.org/10.1016/j.aos.2015.02.002>
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Brandau, M., Endenich, C., Trapp, R., & Hoffjan, A. (2013). Institutional drivers of conformity–Evidence for management accounting from Brazil and Germany. *International Business Review*, 22(2), 466-479. DOI: <https://doi.org/10.1016/j.ibusrev.2012.07.001>
- Brandau, M., Hoffjan, A., & Wömpener, A. (2014). The globalisation of a profession: comparative management accounting in emerging and developed countries. *European Journal of International Management* 6, 8(1), 73-105. DOI: <https://doi.org/10.1504/EJIM.2014.058485>
- Covaleski, M., Evans III, J. H., Luft, J., & Shields, M. D. (2003). Budgeting research: three theoretical perspectives and criteria for selective integration. *Handbooks of management accounting research*, 2, 587-624. DOI: <https://doi.org/10.2308/jmar.2003.15.1.3>
- DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields. *American sociological review*, 48(2), 147-160.
- Ekholm, B. G., & Wallin, J. (2011). The impact of uncertainty and strategy on the perceived usefulness of fixed and flexible budgets. *Journal of Business Finance & Accounting*, 38(1-2), 145-164. DOI: <https://doi.org/10.1111/j.1468-5957.2010.02228.x>
- Fávero, L.P. (2017). *Análise de Dados: Técnicas multivariadas exploratórias com SPSS e Stata*. Elsevier Brasil.
- Frezatti, F., Braga de Aguiar, A., & José Rezende, A. (2007). Strategic responses to institutional pressures, and success in achieving budget targets: A survey at a multinational company. *International Journal of Accounting & Information Management*, 15(2), 50-66. DOI: <https://doi.org/10.1108/18347640710837353>
- Gomes, R. D. P., Pimentel, V. P., Cardoso, M. L., & Pieroni, J. P. (2014). *O novo cenário de concorrência na indústria farmacêutica brasileira*. Rio de Janeiro: Banco Nacional de Desenvolvimento Econômico e Social.
- Guerreiro, M. S., Rodrigues, L. L., & Craig, R. (2012). Voluntary adoption of International Financial Reporting Standards by large unlisted companies in Portugal–Institutional logics and strategic responses. *Accounting, Organizations and Society*, 37(7), 482-499. DOI: <https://doi.org/10.1016/j.aos.2012.05.003>
- Guerreiro, R., Pereira, C. A., Rezende, A. J., & Aguiar, A. B. D. (2010). Fatores determinantes do processo de institucionalização de uma mudança na programação orçamentária: uma pesquisa ação em uma organização brasileira. *Revista de contabilidade do mestrado em ciências contábeis da UERJ*, 10 (1).
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Hansen, S. C., Otley, D. T., & Van der Stede, W. A. (2003). Practice developments in budgeting: an overview and research perspective. *Journal of management accounting research*, 15(1), 95-116. DOI: <https://doi.org/10.2308/jmar.2003.15.1.95>
- Hansen, S. C., & Van der Stede, W. A. (2004). Multiple facets of budgeting: an exploratory analysis. *Management accounting research*, 15(4), 415-439. DOI: <https://doi.org/10.1016/j.mar.2004.08.001>

- Judge, W., Li, S., & Pinsker, R. (2010). National adoption of international accounting standards: An institutional perspective. *Corporate Governance: An International Review*, 18(3), 161-174. DOI: <https://doi.org/10.1111/j.1467-8683.2010.00798.x>
- Kihn, L. A. (2011). How do controllers and managers interpret budget targets?. *Journal of Accounting & Organizational Change*, 7(3), 212-236. DOI: <https://doi.org/10.1108/1832591111164187>
- Libby, T., & Lindsay, R. M. (2010). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management accounting research*, 21(1), 56-75. DOI: <https://doi.org/10.1016/j.mar.2009.10.003>
- Martins, G. D. A., & Theóphilo, C. R. (2009). *Metodologia da investigação científica*. São Paulo: Atlas.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American journal of sociology*, 83(2), 340-363.
- Mucci, D.M., Frezatti, F., & Dieng, M. (2016). As múltiplas funções do orçamento empresarial. *RAC-Revista de Administração Contemporânea*, 20(3). DOI: <https://doi.org/10.1590/1982-7849rac2016140121>
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of management review*, 16(1), 145-179. DOI: <https://doi.org/10.5465/amr.1991.4279002>
- Otley, D. (1999). Performance management: a framework for management control systems research. *Management accounting research*, 10(4), 363-382. DOI: <https://doi.org/10.1006/mare.1999.0115>
- Oyadomari, J. C., de Mendonça Neto, O. R., Cardoso, R. L., & Lima, M. P. (2008b). Fatores que influenciam a adoção de artefatos de controle gerencial nas empresas brasileiras: um estudo exploratório sob a ótica da teoria institucional. *Revista de Contabilidade e Organizações*, 2(2), 55-70.
- Ozdil, E., & Hoque, Z. (2017). Budgetary change at a university: A narrative inquiry. *The British Accounting Review*, 49(3), 316-328. DOI: <https://doi.org/10.1016/j.bar.2016.09.004>
- Pereira, A. J. P., & Gomes, J. S. (2017). Um estudo das estratégias de internacionalização das indústria farmacêutica brasileiras. *Revista de Contabilidade e Organizações*, 11(29), 68-79.
- Piccoli, M. R., Warken, I. L. M., Lavarda, C. E. F., Mazzioni, S., & da Silva Carpes, A. M. (2014). Os múltiplos usos do orçamento em empresas catarinenses. *Unoesc & Ciência-ACSA*, 5(2), 195-206.
- PWC. (2018) *O Setor farmacêutico no Brasil*. PDF. São Paulo.
- Ringle, C. M., Da Silva, D., & Bido, D. D. S. (2014). Modelagem de equações estruturais com utilização do SmartPLS. *Revista Brasileira de Marketing*, 13(2), 56-73. DOI: 10.5585/remark.v13i2.2717
- Russo, P. T., Parisi, C., & Pereira, C. A. (2016). Evidências das forças causais críticas dos processos de institucionalização e desinstitucionalização em artefatos da contabilidade gerencial. *Revista Contemporânea de Contabilidade*, 13(30), 2.
- Santos, M. B., Scherer, F. L., Piveta, M. N., Moura Carpes, A., & Oliveira, M. C. S. F. (2017). Respostas estratégicas às pressões institucionais para sustentabilidade no setor moveleiro. *Revista eletrônica de estratégia & negócios*, 10(2), 100-124. DOI: <http://dx.doi.org/10.19177/reen.v10e22017100-124>
- Sindusfarma (2018). *Perfil da indústria e aspectos relevantes do setor*. PDF. São Paulo.
- Sivabalan, P., Booth, P., Malmi, T., & Brown, D. A. (2009). An exploratory study of operational reasons to budget. *Accounting & Finance*, 49(4), 849-871. DOI: <https://doi.org/10.1111/j.1467-629X.2009.00305.x>
- Tolbert, P. S., & Zucker, L. G. (1999). *The institutionalization of institutional theory. Studying Organization. Theory & Method*. London, Thousand Oaks, New Delhi, 169-184.
- Wijethilake, C., Munir, R., & Appuhami, R. (2017). Strategic responses to institutional pressures for sustainability: The role of management control systems. *Accounting, Auditing & Accountability Journal*, 30(8), 1677-1710.

#### How to cite this paper

Luz, I. P. da; & Lavarda, C. E. F. (2021). The influence of institutional isomorphism on budget acceptance mediated by the purposes of planning and dialogue. *Revista de Contabilidade e Organizações*, 15:e174004. DOI: <http://dx.doi.org/10.11606/issn.1982-6486.rco.2021.174004>