

Influence of budgetary slack and elements of the budgetary process on perceptions of justice^{*,**}

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ABSTRACT

This study examined the relationships between elements of the budgetary process (budgetary participation, the use of budgetary goals for performance assessments, and the use of budgetary goals for variable remuneration purposes), budgetary slack, and perceptions of justice, on the assumption that budgetary slack is an antecedent of perceptions of justice and acts as an intervening variable between elements of the budgetary process and perceptions of justice. Studies addressing the relationship between justice and slack have not considered the positive aspects derived from budgetary slack such as necessary and emergency resources. Moreover, most of these studies have focused on procedural justice and on an element of the budgetary process (budgetary participation), to predict feelings of justice and the creation of slack. The results of the study suggest alternative conceptions for analyzing the relationship between perceptions of justice and budgetary slack, going beyond the economic lens for the latter. By resorting to social exchange theory (SET), a perspective is provided on how elements of the budgetary process affect managers' perceptions of justice and how budgetary slack, as an economic and social exchange resource, shapes those effects. Although researchers have already pointed to budgetary slack as being beneficial for the organization, no studies were found that have analyzed it as a predictor of perceptions of justice. A survey was conducted with a sample of 114 company managers and the hypotheses were tested with the application of structural equation modeling. The results reveal that budgetary slack is an inherent element of the budgetary process, conceived as an economic and socioemotional resource, according to the principles of SET, and used by organizations with a view to greater perceptions of justice. Budgetary slack is essential for predicting managers' feelings of distributive and procedural justice regarding the budgetary process.

Keywords: budgetary slack, budgetary participation, budgetary goals, distributive justice, procedural justice.

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1. INTRODUCTION

Studies on budgets and organizational justice (Chong & Strauss, 2017; Lau & Tan, 2012; Santos et al., 2021; Wentzel, 2002) have primarily focused on questions of equity of budgetary procedures, on the need for budgetary participation as a means of eliciting feelings of justice, and its relationship with management performance. However, the literature is limited regarding the relationship between perceptions of organizational justice and the propensity to create budgetary slack (Liessem et al., 2015), an inherent element of the budgetary process that has attracted the interest of researchers (Baerdemaeker & Bruggeman, 2015).

From this perspective, the empirical research of Chong and Strauss (2017), Lau and Tan (2012), Little et al. (2002), and Wentzel (2004) stands out, along with the theoretical studies of Langevin and Mendoza (2013) and Liessem et al. (2015). Budgetary slack is addressed, in these studies, from the neoclassical perspective, under the economic lens, that is, as a consequence of organizational justice, where high perceptions of justice imply a lower propensity to create slack (Chong & Strauss, 2017; Little et al. 2002). It is assumed that slack is created by managers for their own benefit and in a detrimental way for organizations, as a negative (Little et al., 2002), dysfunctional (Özer & Yilmaz, 2011; Wentzel, 2004), and unethical (Langevin & Mendoza, 2013) behavior, causing inefficiency and waste (Yuen, 2004). These studies indicate that organizations adopt mechanisms in the budgetary process to elicit feelings of justice and inhibit the creation of slack by managers. These discoveries provide valuable knowledge about the link between perceptions of justice and budgetary slack, but two relevant gaps remain.

The first gap observed is that the studies have been based on the relationship between justice and slack from the economic perspective, in which excess resources are seen as a problem, as inefficient management that hinders the creation of value (Beck & Beuren, forthcoming). However, budgetary slack can be analyzed from the behavioral perspective, which suggests that managers can use these resources to stabilize the company's core activities and promote strategic behavior that creates value (Vanacker et al., 2017). Based on this approach, an acceptable level of slack is allowed in the budgetary process, negotiated and provided by the organization to cover contingences and experimentation and serve as a means of motivation (Lukka, 1988), which can affect managers' perceptions of distributive and procedural justice in the budgetary process.

From this perspective, budgetary slack is likely to improve managers' perceptions of justice and act as one of the antecedents of feelings of distributive and procedural justice. Organizational justice denotes up to what point people perceive organizational events as fair (Colquitt et al., 2013). Thus, a budgetary process will probably be perceived as fair when it involves managers, allows them to influence the budget targets, and provides resource slack.

Budgetary slack provides managers with the resources needed to address organizational challenges. According to Vanacker et al. (2017), slack enables managers to reduce potentially dysfunctional conflicts between organizational units derived from the competition for scarce resources. With sufficient slack, unit managers can meet their divergent goals without transforming their units into rivals. Excess resources also enable them to seek opportunities, develop innovation, and absorb failures, if they affect the company (Beck & Beuren, forthcoming).

A manager's budgetary demand can reflect both organizational and individual needs (Nouri, 1994). The absence of slack implies not having the resources to address adversities and exogenous factors that are not under the control of managers, who are often evaluated on fulfilling the budget. The absence of slack can also hinder innovation (Beck & Beuren, forthcoming; Davila & Wouters, 2005), as well as lead to a dispute for scarce resources between managers from the same organization (Vanacker et al., 2017), which can result in a low perception of justice regarding the budgetary process. The literature on organizational justice warns that an individual may alter the quality and quantity of their work to restore justice when they perceive that the result/input relationship is unjust (Beuren & Santos, forthcoming; Wentzel, 2002).

The second gap observed is that most of the studies (Chong & Strauss, 2017; Özer & Yilmaz, 2011) only consider the dimension of procedural justice, ignoring distributive justice. However, feelings of justice are also elicited based on resource allocations, the use of budgetary goals for performance evaluation purposes, and rewards for fulfilling the budget (Maiga & Jacobs, 2007; Wentzel, 2002). Moreover, most of the studies (e.g. Maiga & Jacobs, 2007; Wentzel, 2002) have only focused on one of the elements of the budgetary process (budgetary participation) to predict feelings of justice and the creation of slack, although aspects of performance assessments (Van der Stede, 2000) and rewards (Chow et al., 1991) are relevant in the budgetary process and predictors of distributive justice (Wentzel, 2002).

In light of the above and in accordance with the proposals of social exchange theory (SET) (Blau, 1964), it is presumed that budgetary slack may be one of the antecedents of feelings of justice. SET substantiates predicting how the supply of tangible and socioemotional resources by an organization shapes employees' perceptions of their relationships with it (Blau, 1964; Kramer & Hartmann, 2014). In these conditions, budgetary slack is conceived as a present and interactive resource in the budgetary process, negotiated between the organization and its managers via participative budgeting, in which the managers explicitly negotiate some level of reserves in their budgets (Onsi, 1973), needed for motivation, the obtainment of resources (Lukka, 1988), and innovation (Beck & Beuren, forthcoming), with reflections in perceptions of justice.

Thus, this study proposes to examine the relationships between elements of the budgetary process (budgetary participation, the use of budgetary goals for performance assessments, and the use of budgetary goals for variable remuneration purposes), budgetary slack, and perceptions of justice (distributive and procedural), on the assumption that budgetary slack can be an antecedent of perceptions of justice and act as a intervening variable between elements of the budgetary process and perceptions of justice.

Little et al. (2002) indicated, in their study, that the causality of the variables may have occurred in the opposite way to the model tested, suggesting that budgetary slack could be an antecedent of organizational justice. Moreover, there is disagreement in the literature about the creation of slack being dysfunctional (Van der Stede, 2000), with economic and behavioral theories generating conflicting predictions for important variables and, thus, the studies that analyze these relationship report divergent results (Derfuss, 2012).

Therefore, this study contributes to the literature in various ways, but the main one lies in its originality, by analyzing budgetary slack as one of the possible antecedents of perceptions of distributive and procedural justice and a possible intervening variable between elements of the budgetary process and feelings of justice. Thus, this research makes advances in relation to previous studies by addressing an alternative perspective on the relationship

between justice in the budgetary process and budgetary slack, on the assumption that resource slack can lead to feelings of distributive and procedural justice. Liessem et al. (2015) suggest that slack continues to be an obscure construct whose effect depends on how the researchers assume that managers use surplus resources.

The investigation of different elements of the budgetary process and two dimensions of organizational justice is another contribution. For Mucci et al. (2021), the budgetary process is a complex and multifaceted practice that fulfills various functions in organizations, which are not necessarily compatible with each other, or even conflicting. In various companies, budgets are used simultaneously for planning and performance assessments (Arnold & Artz, 2019). Little is known about the role of different elements of the budgetary process in different perceptions of justice. This study addresses these research gaps by considering elements of the budgetary process, both from the stage of elaborating the budget (budgetary participation) and that of assessment (the use of budgetary goals to evaluate performance and rewards), and its reflections in budgetary slack and perceptions of justice in the distributive and procedural dimensions.

In addition, the research seeks explanatory elements for perceptions of justice. Most of the studies have focused on its consequences (e.g. Beuren & Santos, forthcoming), but there is not yet sufficient evidence about the organizational practices that elicit feelings of justice, specifically when the budgetary process is considered. Within the context of social exchanges, justice reflects a type of symbolic resource that promotes reciprocity actions on the part of employees and managers (Colquitt et al, 2013). The literature indicates that organizational justice is a significant indicator of attitudes and behaviors at work (Beuren & Santos, forthcoming), where a low perception of organizational justice undermines individuals' engagement, their commitment to goals, and their performance (Colquitt et al., 2013; Wentzel, 2002). The results of this study can help to understand which characteristics of the design of the budgetary process, including the presence of budgetary slack, elicit greater feelings of justice among managers.

2. LITERATURE REVIEW AND HYPOTHESES

Under the lens of SET (Blau, 1964), the conceptual model of this research is established (Figure 1). It is conjectured that the elements of the budgetary process constitute antecedents of budgetary slack and of

perceptions of justice, so that distributive justice derives from specific results (the use of budgetary goals for performance assessments and for remuneration purposes) and procedural justice derives from organizational

processes (budgetary participation). It is also assumed that budgetary slack positively affects feelings of justice, seen as an economic and socioemotional resource used by organizations in the expectation that managers will reciprocate with beneficial results for the organization, given that the perception of justice affects behaviors and attitudes at work. By extension, budgetary slack can mediate the relationship between the elements of the budgetary process and perceptions of justice.

SET postulates two forms of exchange in organizations: economic and social (Blau, 1964). The economic exchange relationships are generally short-term agreements (Rupp & Cropanzano, 2002), with the exchange of material and tangible resources between the organization and its

employees (Kramer & Hartmann, 2014). They address financial needs (Cropanzano & Mitchell, 2005), based on mutual obligations and benefits, contracted *ex ante* and subject to formal control systems of rewards and punishments (Kramer & Hartman, 2014). The social exchange relationships, in turn, are of a relational nature, with diffuse and unspecified mutual obligations, making them unenforceable (Kramer & Hartmann, 2014). They involve socioemotional resources, such as recognition, respect, and mutual support, which encourage individuals to go beyond the duties established in the work contract, feeling that the organization values their contributions and is concerned about their wellbeing (Cropanzano & Mitchell, 2005).

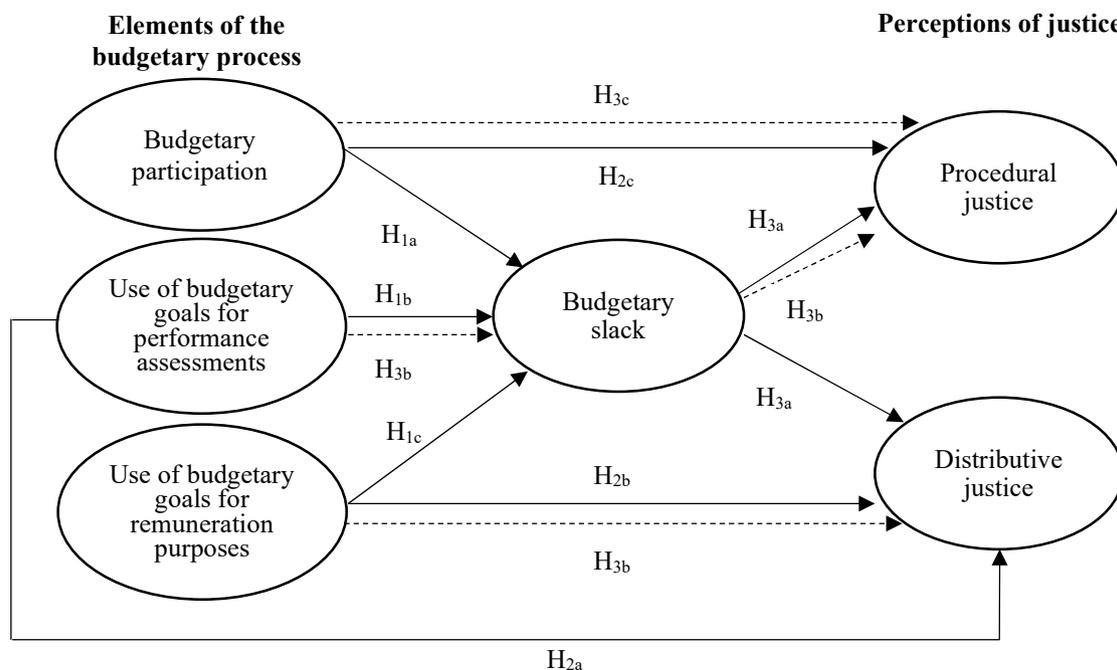


Figure 1 Theoretical research model

Note: The dotted lines represent the indirect effect, where budgetary slack is the intervening variable.

Source: Elaborated by the authors.

Rupp and Cropanzano (2002) comment that the economic and social exchange relationships coexist. Thus, it is assumed that the elements of the budgetary process and the creation of budgetary slack are important for predicting managers’ economic and social exchange relationships with their organization and that they reciprocate with greater perceptions of justice. Kramer and Hartmann (2014) warn that the budget is not only meant to determine managers’ economic positions in the company; specifying formal goals and allocating resources, this can send different social signals as the

managers’ contributions and opinions are taken into consideration during the process, thus affecting their feelings and attitudes in relation to the company. In this case, the budgetary slack obtained via negotiation during the budgetary process is both an economic resource the manager has to address uncertainties and guarantee the continuity of the company’s operations (Elmassri & Harris, 2011), and a source of resources to improve motivation (Lukka, 1988) and autonomy at work (Dunk & Nouri, 1998).

2.1 Elements of the Budgetary Process and Budgetary Slack

The notion of budgetary slack emerged in the management accounting literature in the 1950s, with the first study being conducted by Argyris in 1952. Later, other studies offered important contributions to the development of the research in that area, such as those conducted by Merchant (1985), Onsi (1973), and Schiff and Lewin (1970), as highlighted by Lukka (1988). Its concept is closely related to the practice of underestimating revenues, overestimating costs, or underestimating performance capacities to make the budgetary goals more easily achievable (Dunk, 1993; Yuen, 2004).

Merchant (1985) conceived budgetary slack as the excess value budgeted in an area above the value needed. Beck and Beuren (forthcoming) suggest that slack does not necessarily represent dysfunctional behavior or inefficient resource allocation; on the contrary, it can be intentionally used to promote innovation due to its capacity to direct time and resources toward thinking and experimentation, as well as to absorbing possible shortcomings related to the intended innovation. However, they stress that the company's management control systems (MCSs) need formal and informal mechanisms to control the practice of slack according to the intended objective.

Derfuss (2012) indicates that researchers have measured budgetary slack in different ways. Some studies have captured it through managers' individual propensity to create it, as proposed by Onsi (1973). Others have measured it following Dunk's (1993) approach, in terms of the capacity to fulfill budgetary goals on the assumption that budgets that contain slack are more easily achievable than those without slack. Derfuss (2012) also lists studies that have measured budgetary slack based on the extent of managers' slack creating behaviors or based on accounting data in which an estimate is made of the slack created in the company.

Studies (e.g. Merchant, 1985; Yuen, 2004) have revealed that budgetary slack can be increased or reduced by the way budgetary systems are designed and implemented. Budgetary participation has been extensively studied and associated with budgetary slack (Yuen, 2004). For Schiff and Lewin (1970), budgetary participation by definition leads to the creation of slack. Lukka (1988) argues that participation enables managers to influence the goals and create budgetary slack. Through their budgetary participation managers influence the plans, as they share with their superiors decisions that affect their areas of responsibility (Dunk & Nouri, 1998).

However, Baerdemaeker and Bruggeman (2015) warn that there is little consistent evidence on the effect of

budgetary participation on the creation of budgetary slack. While some studies (e.g. Dunk & Nouri, 1998; Lukka, 1988) have found a positive relationship, others (e.g. Merchant, 1985; Onsi, 1973) have provided evidence that participation can reduce managers' propensity to create slack, due to the fact that participation improves managers' commitment and, thus, reduces their propensity to create it (Yuen, 2004). It is conjectured that these divergences may derive from the form in which slack is conceived (as a dysfunctional or beneficial behavior) and how it is used by managers.

Budgetary participation is a complex social process intimately related to other phenomena, including situational needs (Dunk & Nouri, 1998) in which managers discuss budgetary goals and request resources for unexpected demands, with the aim of fulfilling the organizational objectives. From this perspective, budgetary slack represents a functional behavior, given that it protects managers from events outside their control (Webb, 2002). Thus, it is presumed that budgetary participation is an antecedent of the creation of budgetary slack, as follows:

H_{1a}: budgetary participation positively influences budgetary slack.

The literature also foresees that the use of budgetary goals for performance assessments can impact the creation of slack (Dunk & Nouri, 1998; Merchant, 1985; Yuen, 2004). Van der Stede (2000) explains that a positive relationship is expected between an emphasis on achieving budgetary goals for performance assessment purposes and managers' propensity to create slack, given that strict budgetary controls imply that salaries, resources, and career prospects are dependent on fulfilling the budget. So, managers are motivated to influence their budget so that it is more easily achieved or so that their performance appears to be better (Merchant, 1985; Yuen, 2004).

Budgetary slack also occurs when subordinates try to negotiate budgets, if they expect formal rewards to depend on fulfilling the budget (Dunk & Nouri, 1998). For Schiff and Lewin (1970), if subordinates see their rewards as depending on fulfilling the budget, they may consider having slack in their budgets to be advantageous. Researchers (e.g. Chow et al., 1991; Dunk & Nouri, 1998; Merchant, 1985) argue that budgets are generally performance assessment parameters used in organizations and, as subordinates usually participate in planning them, managers make efforts to influence these criteria to obtain what they consider to be achievable budgets.

Derfuss (2012) warns that predictions of the effects of performance assessments and of budget-based incentives on budgetary slack are difficult to establish because the theoretical basis is contradictory. From the economic

perspective, Derfuss (2012) explains that assessments and incentives based on the budget can incentivize managers to retain private information to create budgetary slack, given that it enables the achievement of budgetary goals and guarantees favorable evaluations and the receipt of a bonus.

From the behavioral perspective, more difficult budgetary goals (without slack) provide managers with motivation (Schoute & Wiersma, 2011), since budget-based assessments and incentives reinforce the acceptance of and commitment to budgetary goals; thus, fulfilling the goals helps them to achieve the desired results, with positive evaluations or a bonus (Derfuss, 2012). Moreover, according to the SET logic (Blau, 1964) and the precepts of organizational justice (Lau & Tan, 2012), if the resources destined in the budget and the procedures of organizations are considered fair, managers will feel that their organizations are treating them appropriately and that they are respected by their superiors. With this, their sense of self-importance and self-respect tends to increase, which leads to less stress and tension (Lau & Tan, 2012), with no need to include budgetary slack for personal advantage purposes (performance assessment and variable remuneration), as levels of slack for organizational demands are negotiated between the organization and managers via participative budgeting.

Yuen (2004) suggests that managers' propensity to create budgetary slack is greater in organizations with flawed assessment and rewards systems, with unclear budgetary goals, and, consequently, it increases their level of difficulty. According to the author, managers' propensity to create slack is lower when the rewards systems are designed with clear and objective budgetary goals. Thus, competing arguments result in tension regarding the effect of using budgetary goals for performance assessments and for variable remuneration purposes over budgetary slack. Considering that it is not possible to determine which effect will prevail, whether positive or negative, we merely predict an influence. Thus, the following hypotheses are proposed:

H_{1b}: the use of budgetary goals for performance assessments influences budgetary slack.

H_{1c}: the use of budgetary goals for variable remuneration purposes influences budgetary slack.

2.2 Elements of the Budgetary Process and Perceptions of Justice

The perceived justice derived from the allocation of organizational resources (Rupp & Cropanzano,

2002), from performance classifications, and from the distribution of monetary rewards (Colquitt et al., 2013) is called distributive justice. Organizations can link managers' rewards, such as benefits, to the budgetary results achieved (Dunk & Nouri, 1998). Thus, the budget affects the performance goals through which managers are evaluated and rewarded, besides being reflected in the portion of budgetary resources made available for their units (Little et al., 2002). When the skills and efforts to achieve the individual goal (inputs) are compatible with the rewards for achieving the budgetary goal (outcomes), there is a perception of distributive justice (Lindquist, 1995).

The results of distributive justice can have both economic and socioemotional consequences (Rupp & Cropanzano, 2002). The authors elucidate that payment is valued because it provides individuals with means to achieve social status, a sense of self-esteem, esteem, and material comfort. Analogously, this analysis can be applied in the use of budgetary goals for performance assessments and variable remuneration. Managers feel rewarded (socioeconomically) after achieving favorable performance and enjoying variable remuneration for achieving the budgetary goals, leading to greater feelings of distributive justice. Consistently with these arguments it is assumed that:

H_{2a}: the use of budgetary goals for performance assessments positively influences perceptions of distributive justice.

H_{2b}: the use of budgetary goals for variable remuneration purposes positively influences perceptions of distributive justice.

While distributive justice concerns results such as rewards (Colquitt et al., 2013), procedural justice refers to the perceptions of equity of the processes used by superiors to evaluate subordinates' performance, give feedback, and determine rewards, such as promotions and salary increases (Langevin & Mendoza, 2013). Individuals perceive procedural justice when they experience opportunities to influence decisions, express their opinions, or have necessary information for decision making (Beuren & Santos, forthcoming; Özer & Yilmaz, 2011). In the budgetary process, these aspects can be satisfied with budgetary participation (Wentzel, 2002).

Participation in the budgetary process enables subordinates and superiors to express their concerns in relation to budgetary processes (Lindquist, 1995). Lau and Tan (2012) and Wentzel (2002) found that budgetary participation is reflected in greater feelings of procedural justice. Budgetary participation leads to greater feelings of procedural justice because it gives managers the right to participate and express their opinions, suggestions,

and concerns during the budgetary process and enables their involvement in defining the budgetary goals and organizational resource-allocating procedures. Thus, the following hypothesis was formulated:

H_{2c}: budgetary participation positively influences managers' perceptions of procedural justice.

2.3 Perceptions of Justice and Budgetary Slack

Slack can also be analyzed from the perspective that it is necessary to ensure the company's long-term survival, where it acts as a stabilizer in maintaining the plans devised, even in times of crisis (Beck & Beuren, forthcoming; Cyert & March, 1963). Under this focus, slack is not necessarily undesirable in itself; it may be beneficial for the organization (Cyert & March, 1963; Lukka, 1988; Webb, 2002). Its value depends on the way it is used, as it provides a source of resources that may not be otherwise available or approved due to their scarcity (Onsi, 1973; Schoute & Wiersma, 2011). Thus, consistently with the proposals of SET, it is argued that budgetary slack can be an antecedent of feelings of justice.

SET involves a series of interactions that generate relational obligations (Kramer & Hartmann, 2014). These interactions are generally seen as interdependent and dependent on another person's actions (Blau, 1964). Cropanzano and Mitchell (2005) explain that interdependence, considered a characteristic of social exchange, involves mutual and complementary arrangements in which one party's action leads to the other's response. If one person provides a benefit, the receiving party responds in kind. The individual feels compelled to positively reciprocate toward the organization, due to the obligation created by the positive and beneficial actions of another toward them (Cropanzano & Mitchell, 2005; Sungu et al., 2019). For Sungu et al. (2019), the reciprocity norm results in employer-employee satisfaction when the employee has the necessary resources for the expected reciprocity, as well as the feeling of obligation; however, when the employee feels obligation, but lacks the capacity to deliver a result, they will probably feel uncomfortable in the exchange relationship.

This can induce the organization to maintain and accept managers negotiating a certain level of slack in their budgets, since, according to SET, the actions of one party depend on the behavior of the other (Cropanzano & Mitchell, 2005). Elmassri and Harris (2011) present evidence that slack is created, but not negatively perceived by managers, wherever they are in the hierarchy. The authors found that slack acts as a form of contingency

planning, seen as rational and acceptable by superiors and subordinates. Under this focus, managers, with the aim of continuing to obtain resource slack, can use these resources according to the long-term organizational interests (Van der Stede, 2000) to their own detriment, while, in their absence, they may sacrifice priority objectives when multiple objectives cannot be achieved (Davila & Wouters, 2005).

If the budgetary controls are very strict and the business unit managers have little discretion, the corporate management may suffocate initiatives that promise long-term or less certain benefits (Merchant, 1990; Van der Stede, 2000). According to SET, interdependence reduces risk and stimulates cooperation (Cropanzano & Mitchell, 2005). Budgetary slack would enable managers to pursue multiple objectives by dealing with adverse exogenous factors (Davila & Wouters, 2005), it would protect them from uncontrollable events (Webb, 2002), such as market uncertainties (Schoute & Wiersma, 2011), and it would enable them to focus on the short and long term (Davila & Wouters, 2005).

From this perspective, budgetary slack would elicit feelings of distributive and procedural justice, since it would be characterized as an economic and social resource provided and enabled by the organization (Davila & Wouters, 2005) during the negotiation of the budgetary process. Rupp and Cropanzano (2002) argue that individuals with a greater perception of organizational justice reciprocate toward the organization with high levels of job satisfaction, greater organizational commitment, and performance. In light of the above, the following research hypothesis is formulated:

H_{3a}: budgetary slack positively influences managers' perceptions of distributive and procedural justice.

It is also speculated that budgetary slack can mediate the relationships between the elements of the budgetary process and perceptions of justice. The understanding is adopted that slack is created and negotiated as a result of the design and use of the budgetary process (Merchant, 1985), besides being present in organizations (Elmassri & Harris, 2011; Lukka 1988) and being an element of social exchange. In this sense, when organizations use budgetary goals for performance assessment and remuneration purposes, managers may request additional resources with the aim of achieving multiple objectives and having security to fulfill the budget. Lukka (1988) comments that the needs for security can reinforce the intention to obtain resources, especially in situations in which the budgets are inflexibly used as a resource-allocating device.

A participative budget enables resource demands to be requested and negotiated to address organizational challenges (Milani, 1975). Without resource slack there is less margin to, for example, provide extra financial incentives to maintain the main employees in the organization. Managers may also use resource slack to avoid relationships being closed prematurely (Vanacker et al., 2017). Following the reciprocity norm, by obtaining

resources in these conditions, employees would conceive of the organizational environment as being fairer. Thus, we have the following hypotheses:

H_{3b}: budgetary slack partially mediates the effect of using budgetary goals for performance assessments and variable remuneration on distributive justice.

H_{3c}: budgetary slack partially mediates the positive effect of budgetary participation on procedural justice.

3. RESEARCH METHODOLOGY

3.1 Sample and Data Collection

A survey was conducted with managers of different organizational areas of the 500 biggest companies in the South region listed in *Grupo Amanhã*. The search for the managers' contact details was conducted via the LinkedIn social network, using the terms "managers," "directors," and "coordinators." Next, an invitation was sent to a thousand managers (the maximum number of invitations allowed without paying an annual fee) to compose the LinkedIn social network. The sample was limited to one respondent from each area of the company. The questionnaire was sent via Google Forms to the approximately 500 managers who accepted to compose the social network and, in the period from September of 2014 to November of 2014, 114 valid questionnaires were returned.

The demographic profile of the respondents indicates that 76% occupy manager and/or director roles and 63% have worked in their company for more than five years. The respondents are from different organizational areas, such as accounting/controlling (21), administrative/financial (16), sales (10), supplies (9), production (8), and information technology (IT)/technology (8). In addition, 45.6% of the respondents have been in the management role for more than five years. With relation to education, 73.7% have completed a specialization or master's course and 26.3% are graduates or have completed a technical course. The predominant areas of training are administration (38.6%), accounting sciences (16.7%), and engineering (14%). With relation to the respondents' age, 53.5% are aged up to 40, while 29.8% are aged up

to 50 and 16.7% are aged over 50 years. The respondents are from the following company types: metallurgical (18.4%), financial sector (12.3%), electricity (10.5%), services (10.53%), and textiles (7.9%), among others. Most of the companies are publicly-traded companies (43.8%), from the private economy (85.1%), with more than a thousand employees.

In the comparison of the respondents occupying roles in the accounting, financial, budgetary, or related area ($n = 49$) versus other areas ($n = 65$), no significant differences were observed in terms of budgetary participation ($p = 0.4910$), use of budgetary goals for performance assessments ($p = 0.2195$), budgetary slack ($p = 0.2818$), distributive justice ($p = 0.2018$), and procedural justice ($p = 0.4469$). There was also no difference between the constructs ($p > 0.05$) in terms of gender and time at the company. For age, there were only differences for the independent variable of budgetary participation, where the managers aged 40 or over ($n = 61$) presented a higher score ($M = 5.63$) in comparison with the managers aged under 40 years old ($n = 53$; $M = 4.92$).

3.2 Measurement of the Variables

The distributive justice, procedural justice, budgetary slack, and budgetary participation variables were measured by multiple items, with statements taken and/or adapted from previous studies, based on a 7-point Likert-type scale, where 1 = totally disagree and 7 = totally agree. The variable remuneration and budgetary goal variables were captured by items in dichotomous form (Table 1).

Table 1
Constructs and statements in the questionnaire

Constructs	Statements	Authors
Distributive justice	DJ1 – <i>My area of responsibility receives the budget it deserves.</i>	Wentzel (2002)
	DJ2 – <i>I consider the budget of my area of responsibility to be fair.</i>	
	DJ3 – <i>The budget attributed to my area of responsibility adequately reflects my needs.</i>	
	DJ4 – <i>My supervisor expresses concern and sensitivity when they discuss budgetary restrictions allocated to my area of responsibility.</i>	
Procedural justice	PJ1 – <i>The current budgetary procedures contain provisions that allow me to resort to/request budgetary adjustments for my area of responsibility.</i>	Wentzel (2002)
	PJ2 – <i>Those responsible for the budgetary decisions try not to favor one area of responsibility to the detriment of another.</i>	
	PJ3 – <i>Those responsible for the budgetary decisions adequately explain how the budgetary allocations are determined for my area of responsibility.</i>	
	PJ4 – <i>The budgetary procedures are applied consistently in all areas of responsibility and over time.</i>	
	PJ5 – <i>The current budgetary procedures adequately represent the concerns of all areas of responsibility.</i>	
	PJ6 – <i>Budgetary decisions for my area of responsibility are based on precise information and well-informed opinions.</i>	
	PJ7 – <i>The current budgetary procedures are in conformity with my own ethical and moral standards.</i>	
Budgetary slack	BS1 – <i>The budgets established for my area of responsibility are easily achievable.</i>	Dunk (1993)
	BS2 – <i>I have a tendency to maintain a high amount of the budget for unforeseen needs or requests.</i>	Onsi (1973)
	BS3 – <i>The budgets of my area of responsibility are NOT particularly demanding.</i>	Dunk (1993)
Budgetary participation	BP1 – <i>I’m involved in defining all parts of my budget.</i>	Leach-López et al. (2007), Milani (1975)
	BP2 – <i>I have a strong influence on the final amount of the budget of my area of responsibility.</i>	
	BP3 – <i>My contributions are important for the elaboration of the budget of my area of responsibility.</i>	
	BP4 – <i>When the budget is being defined, my supervisor very often seeks to address my requests, opinions, and/or suggestions.</i>	
	BP5 – <i>I always participate in the meetings to set the budgetary objectives of my area of responsibility.</i>	
	BP6 – <i>I elaborate the budget of my area of responsibility, but my superior reviews it.</i>	
Use of budgetary goals for variable remuneration purposes	VR2 – <i>In your organization, besides the fixed remuneration (salary), is there payment of variable remuneration, such as profit sharing?</i> () Yes () No	Inspired by Merchant (1990)
	<i>If the answer is yes to the previous question, is the receipt of variable remuneration linked to the achievement of goals?</i> () Yes () No	
Use of budgetary goals for performance assessments	PA5 – <i>Is the goal exclusively linked to the fulfillment of the budget?</i> () Yes () No	

Source: *Elaborated by the authors.*

The organizational justice statements were taken from the study of Wentzel (2002), the choice of which derives from the fact that they assess the perception of justice from the viewpoint of the budget. The budgetary slack statements were adapted from the study of Dunk (1993) and Onsi (1973). Van der Stede (2000) comments that budgetary slack has been cited in the literature under a variety of labels and that, in general, there is slack in the budget if the business unit managers have managed to negotiate easily achievable goals. In this study, considering that understanding of slack, a statement was used from the

study of Onsi (1973) that assesses whether the managers have a tendency to maintain a high amount of the budget for unforeseen needs or requests. This statement directly captures the individual’s behavior, unlike the others, which are written in the third person and may not be indicative of the manager’s behavior (Nouri, 1994). Another two statements were taken from the study of Dunk (1993).

The budgetary participation statements were adopted from the study of Milani (1975) by Leach-López et al. (2007) and here a few more wording alterations were made.

For the constructs use of budgetary goals for performance assessments and use of budgetary goals for remuneration

purposes, dichotomous statements were adopted, inspired by the study of Merchant (1990).

4. RESULTS

4.1 Measurement Model and Descriptive Statistics

The measurement model was analyzed regarding the reliability (individual and composite) and validity (convergent and discriminant) of the construct measures (Hair et al., 2016). The factorial loads of each variable were examined to assess the individual reliability of the items, which presented loads above 0.70 in their respective constructs, except one statement on the budgetary slack construct. The standardized loads should have at least 0.70 (Hair et al., 2016), but lower loads are acceptable if other indicators of the construct have higher loads (Chin,

1998), which is the case of this research. Specifically, the statements “the budgets of my area of responsibility are NOT particularly demanding” (BS3) presented a factorial load of 0.609, while statements BS1 and BS2 obtained, respectively, factorial loads of 0.887 and 0.730.

The average variance extracted (AVE) and composite reliability (CR) of all the constructs were above 0.50 and 0.70, respectively (Table 2), which confirms their convergent validity and internal consistency of the model (Hair et al., 2016). Discriminant validity was also confirmed, as the values on the diagonal (square root of the AVE) of each construct are higher than those outside the diagonal (correlations) (Hair et al., 2016).

Table 2

Matrix of correlations between latent variables

Latent variable	BS	DJ	PJ	BP	PA	VR
Budgetary slack (BS)	0.750					
Distributive justice (DJ)	0.201	0.863				
Procedural justice (PJ)	0.285	0.831	0.841			
Budgetary participation (BP)	0.214	0.716	0.723	0.861		
Use of budgetary goals for performance assessment purposes (PA)	0.024	0.392	0.346	0.163	1.000	
Use of budgetary goals for variable remuneration purposes (VR)	-0.063	0.101	0.106	-0.005	0.436	1.000
Mean	3.73	5.01	4.97	5.25	-	-
Standard deviation	1.63	1.52	1.64	1.75	-	-
Average variance extracted (AVE) > 0.50	0.563	0.744	0.707	0.741	1.000	1.000
Composite reliability (CR) > 0.70	0.791	0.920	0.944	0.945	1.000	1.000

Source: *Elaborated by the authors.*

4.2 Structural Model and Hypothesis Tests

Bootstrapping was used to obtain the path values, t-value, and p-value of each relationship, which enables us to analyze the hypotheses, according to Table 3. We

also proceeded to evaluate the structural model based on three indicators recommended by Ringle et al. (2014): Pearson's coefficient of determination (R^2), predictive relevance (Q^2) or the Stone-Geisser indicator, and effect size (F^2) or Cohen's indicator.

Table 3

Results of the structural model – Hypothesis tests

	Hypotheses	Structural coefficient	Standard error	t-value	p-value	Decision
H _{1a}	Budgetary participation → BS	0.210	0.091	2.313	0.021	Not rejected
H _{1b}	Budgetary goals for performance assessments → BS	0.020	0.072	0.276	0.782	Rejected
H _{1c}	Budgetary goals for variable remuneration → BS	-0.070	0.082	0.857	0.392	Rejected
H _{2a}	Budgetary goals for performance assessments → DJ	0.418	0.076	5.484	0.000	Not rejected
H _{2b}	Budgetary goals for variable remuneration → DJ	-0.070	0.063	1.103	0.270	Rejected
H _{2c}	Budgetary participation → PJ	0.694	0.057	12.188	0.000	Not rejected
H _{3a}	BS → DJ	0.187	0.090	2.074	0.038	Not rejected
	BS → PJ	0.136	0.067	2.047	0.041	

Notes: Assessment of the structural model. Pearson’s coefficient of determination (R^2): budgetary slack (BS) = 0.050; distributive justice (DJ) = 0.194; procedural justice (PJ) = 0.540; predictive relevance (Q^2): BS = 0.007; DJ = 0.132; PJ = 0.371; effect size (F^2): BS = 0.053; DJ = 0.157; JP = 0.431.

Source: Elaborated by the authors.

The structural coefficient analysis indicates a significant and positive effect of budgetary participation on the creation of slack ($\beta = 0.210, p = 0.021$), which supports the non-rejection of H_{1a}. However, no significant relationships were found between both the use of budgetary goals for performance assessments and budgetary slack and the use of budgetary goals for variable remuneration purposes and budgetary slack, which leads to the rejection of H_{1b} and H_{1c}, respectively.

A moderately-sized coefficient ($\beta = 0.694, p = 0.000$) indicates that budgetary participation is an important predictor of procedural justice. Thus, H_{2c} is supported. The results also show positive and significant associations between budgetary slack and both distributive justice ($\beta = 0.187, p = 0.38$) and procedural justice ($\beta = 0.136, p = 0,041$), which supports the non-rejection of H_{3a}, that budgetary slack positively influences the perception of distributive and procedural justice. There were no significant relationships between budgetary goals for variable remuneration purposes and distributive justice,

which leads to the rejection of H_{2b}. However, a positive and significant association is observed between budgetary goals for performance assessments and perceptions of distributive justice ($\beta = 0.418, p = 0.00$), so H_{2a} is not rejected.

To test the measurement hypotheses, the four steps proposed by Baron and Kenny (1986) were followed. As the variables use of budgetary goals for performance assessments and use of budgetary goals for variable remuneration purposes (independent variables) did not affect budgetary slack (mediating variable), it is not possible to infer that slack acts as an intervening variable between these elements of the budgetary process and perceptions of distributive justice, which leads to the rejection of H_{3b}. However, there were significant relationships between budgetary participation and budgetary slack (step 1 for the mediation test) and between budgetary slack and procedural justice (step 3). Thus, we proceeded to analyze the structural model without the mediating variable, the results of which are presented in Table 4.

Table 4

Direct, indirect, and total effects of the mediation models

Hypothesis H _{3c}	Effect of the model without mediation	With mediation of budgetary slack		
		Direct effect	Indirect effect	Total effect
Budgetary participation → budgetary slack → procedural justice	0.723**	0.694*	0.029	0.722**

* = $p < 0.05$; ** = $p < 0.001$.

Source: Elaborated by the authors.

By excluding budgetary slack, a positive and significant relationship ($\beta = 0.723$, $p = 0.000$) was verified between budgetary participation and procedural justice (step 2), the effect of which weakens with the addition of the mediating variable ($\beta = 0.694$, $p = 0.000$) (step 4). However, this effect does not decrease by a large amount, which indicates that the mediating variable cannot be considered as strong (Baron & Kenny, 1986). Moreover, the indirect effects were not significant, which leads to the rejection of H_{3c} , that budgetary slack partially mediates the positive effect of budgetary participation on procedural justice.

4.3 Discussion of the Results

The first set of hypotheses verified whether the elements of the budgetary process influence budgetary slack. The results only showed significant and positive relationships between budgetary participation and budgetary slack ($\beta = 0.210$, $p = 0.021$); however, the explanatory power of the creation of slack was low ($R^2 = 0.05$). These results appear to be aligned with the literature, which suggests that the creation of budgetary slack depends on a complex set of variables and relationships (Dunk & Nouri, 1998; Maiga & Jacobs, 2007) and that budgetary participation is only one explanatory factor (Elmassri & Harris, 2011), but not sufficient for the creation of budgetary reserves (Dunk & Nouri, 1998).

Another possible reason for these findings is that only a certain level of budgetary slack (see descriptive statistics presented in Table 2) appears to be negotiated between managers and their respective organizations (Baerdemaeker & Bruggeman, 2015) for them to cover innovations, organizational challenges, and possible contingences. Elmassri and Harris (2011) conceive budgetary slack as a rational element of budgetary management, accepted as part of the organizational culture within a permitted interval. Davila and Wouters (2005) warn that budgetary slack is not created indiscriminately, but only when attention to alternative objectives requires it. It is thus assumed, in accordance with SET (Blau, 1964), that during the participative budget managers bargain over extra resources for specific organizational demands, given that slack is an economic and social resource present in the budgetary process.

The results also do not support the hypotheses that foresee that the use of budgetary goals for performance assessment and for variable remuneration purposes is positively related with the creation of slack. There are at least three ways of interpreting the lack of support for H_{1b} and H_{1c} . First, managers do not necessarily take advantage of this configuration of the budgetary system to create

slack for their own benefit. If slack is a negotiated and offered resource, in conformity with the reciprocity rule proposed in SET (Blau, 1964; Kramer & Hartmann, 2014; Rupp & Cropanzano, 2002), individuals will feel in debt to the organization and will not try to create slack for their own benefit, seeking only favorable performance and remuneration for fulfilling the budget. Second, a strict performance evaluation and variable remuneration system linked to the fulfillment of the budget may inhibit the creation of slack. One of the purposes of strict budgetary controls is to increase the probability of slack being detected and thus reduce it (Van der Stede, 2000). Third, the metrics used in the research to capture the constructs may have contributed to these results, constituting one of the limitations of the study.

The second group of hypotheses determined whether the elements of the budgetary process affect the managers' perceptions of justice. The results indicated that budgetary participation strengthens feelings of procedural justice, which is consistent with the results of the research of Chong and Strauss (2017) and Wentzel (2002). The generation of obligations foreseen in SET (Blau, 1964) helps to explain the creation of higher levels of perceptions of procedural justice via managers' budgetary participation. Participation enables them to express opinions, make claims, and feel involved in the budgetary process (Lau & Tan, 2012; Leach-López et al., 2007; Milani, 1975). According to the reciprocity rule, they perceive that the formal procedures adopted in the organization are fair and that they have been correctly treated in the organization, reflecting in their attitudes and behaviors in the work environment (Kramer & Hartmann, 2014).

The results also indicate that the use of budgetary goals for variable remuneration purposes is not related with a feeling of distributive justice. However, the use of budgetary goals for performance assessments can illicit perceptions of distributive justice. Feelings of justice triggered based on the budgetary goal diverge from the proposal of Langevin and Mendoza (2013) regarding the use of multiple indicators in performance assessments. One possible explanation is that, as the managers participate in the budget elaboration process, they believe it is fair for performance assessments to be linked to the achievement of budgetary goals (Lau & Tan, 2012). It is also possible that the managers linked the distribution of resources to their performance classification according to the fulfillment of the budget, and not necessarily to variable remuneration, with this being a subsequent stage of the performance assessment.

The third group of hypotheses examined the relationships between budgetary slack and perceptions

of justice. Based on SET (Blau, 1964), it was observed that, given the resources offered (slack), managers respond with greater perceptions of distributive and procedural justice. From this perspective, budgetary slack acts as an antecedent of feelings of justice. The results suggest that the excess resources derived from budgetary slack may be beneficial for the organization due to its reflections in the perceptions of justice (Colquitt et al., 2013). The path coefficients indicate that the opposite is also true: the absence of slack can lead to feelings of injustice. Scarcity of resources, pressure for productivity, and difficulty innovating can cause negative feelings toward the organization.

The results also show that budgetary slack did not mediate the relationships of the use of budgetary goals for performance assessment and for variable remuneration purposes with distributive justice and of budgetary participation with procedural justice. This suggests that budgetary slack is considered an inherent element of the budgetary process that organizations use together with the other elements analyzed to bolster managers' perceptions of distributive and procedural justice regarding the budgetary process. Evidence of these arguments is present in the literature that highlights the positive effects of budgetary slack (e.g. Beck & Beuren, forthcoming; Lukka, 1988), in the assumptions of SET (Blau, 1964), that organizations offer economic and socioeconomic resources to shape the perceptions that managers have of their relationships with the organization (Rupp & Cropanzano, 2002), in the results of the descriptive statistics, which indicated a high intermediate level of slack, in the positive and significant relationships between slack and perceptions of justice, and in the respective mediation tests.

These results suggest alternative conceptions for analyzing the relationship between perceptions of

organizational justice and budgetary slack that go beyond the economic lens of budgetary slack, with insights for possible future research in this area. By resorting to SET (Blau, 1964), a perspective is provided on how elements of the budgetary process affect managers' perceptions of justice and how budgetary slack, conceived as an economic and social exchange resource, contributes to increasing feelings of justice. In the case of this study, the use of budgetary goals for performance assessments and budgetary slack increase the perceived justice of the results of the budgetary process, while budgetary participation and budgetary slack contribute to perceiving that the process used for the allocation of resources is fair. When the budgetary system is designed to provide managers with distributive and procedural justice, it means that they receive fair and beneficial treatment from the organization. In the view of SET (Blau, 1964), fair treatment provided by the organization via economic and social resources and managers' positive perception of that treatment culminate in more productive behaviors and in better results.

These findings are important for managerial practice in reviewing budgetary procedures with the aim of stimulating feelings of justice and achieving the organizational objectives. Rupp and Cropanzano (2002) highlight that when individuals experience a high sense of organizational justice they feel greater support and recognition from their leaders and organizations, with this perception of justice leading to the individuals perceiving the importance of their roles in the organization, which positively impacts their attitudes and actions, with them presenting pro-organizational behaviors. Therefore, this study suggests that budgetary slack is an important element for predicting managers' feelings of justice regarding the budgetary process and that can be used by managers, considering the organizational objectives.

5. CONCLUSIONS

Under the lens of SET (Blau, 1964), it was observed that budgetary participation, the use of budgetary goals for performance assessments, and budgetary slack are characterized as economic and social exchange resources used by organizations to obtain greater perceptions of distributive and procedural justice. The study also indicated that budgetary slack is fundamental for predicting managers' feelings of distributive and procedural justice regarding the budgetary process.

Although researchers (Davila & Wouters, 2005; Elmassri & Harris, 2011) have already indicated that

budgetary slack is beneficial for the organization, no studies were found that have analyzed budgetary slack as a predictor of perceptions of justice, that being one of the main contributions of this research. Previous studies have addressed budgetary slack as a consequence of justice, in which greater feelings of justice implied a lower propensity to form slack, while the results of this study suggest that slack can trigger feelings of justice. This derives from differences in the conception of budgetary slack: while in those studies it represents a resource used by managers for their own benefit, in this study it

is offered to managers for innovation, contingences, and motivation, but these conceptions are not contradictory in themselves, given the bidirectionality of budgetary slack and of organizational justice.

The study also contemplated distributive justice, absent in most of the previous studies, with a similar purpose. It considered the antecedents of perceptions of justice, instead of only focusing on its consequences. The model tested presents alternative perspectives of investigations regarding the link between budgetary slack and perceptions of justice. However, additional studies are needed to understand the intentionality of the action of creating reserves, the motives for their creation, and the possible benefits. Liessem et al. (2015) highlight that agency theory performs an important role, but they warn about the need to use other theoretical lenses to explain the budgetary slack phenomenon.

The results of this study also have implications for organizational practice. Organizations should make efforts to improve their managers' perceptions of distributive and procedural justice regarding the budgetary process, given that organizational procedures that are considered to be fair are characterized as one of the mechanisms used to strongly influence individuals' attitudes and behaviors in favor of the organization and to inhibit counterproductive behaviors. Thus, organizations that assess managers based on the achievement of budgetary goals should make sure the managers are clear about the proposed goals and their respective roles, and that these goals and their level of difficulty can be discussed via participative budgeting. Moreover, they should establish mechanisms so that the (limited) resource slack can be monitored and used in favor of the organization.

The feeling of justice does not derive from all requests being met, but it can be increased with quality feedback. This denotes the relevance of the participative budget, in which subordinates can express their opinions and obtain explanations when their requests are not fulfilled. The results of the research reinforce the idea that perceptions of procedural justice depend on budgetary participation. These are implications that organizations need to consider in the design and use of the budgetary process.

Among the limitations of the study is the social desirability bias in the participants' answers (Merchant, 1985). The choice of the theoretical model itself characterizes a limitation, given that variables needed to be omitted to define the scope of the study. The low explanatory value (R^2) for the budgetary slack construct indicates that the model used did not adequately capture all the relevant variables for explaining that construct. Future studies could consider other antecedents of budgetary slack (e.g. environmental uncertainty, information asymmetry, the internationalization level of companies) and include consequences of the perception of justice derived from the budgetary process. Similarly, the design and use of the budgetary process and its characteristics are complex.

In addition, future studies could measure budgetary slack based on different conceptions so as to directly capture the positive aspects of budgetary reserves. Despite these limitations, the study presents contributions by indicating that what was originally described as a negative behavioral phenomenon can be rethought of as a strategy for fostering feelings of justice in organizations.

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