

## Effects of information sharing, occupational stress and job insecurity on the relationship between the budget participation and the commitment to goals

Efeitos do compartilhamento de informações, estresse ocupacional e insegurança no trabalho na relação entre a participação orçamentária e o compromisso com as metas

Efectos del intercambio de información, el estrés laboral y la inseguridad en el trabajo sobre la relación entre la participación en el presupuesto y el compromiso con los objetivos

**Márcia Nascimento dos Santos**

Mestre em Ciências Contábeis pela Universidade Federal de Santa Maria (UFSM)  
Programa de Pós-Graduação em Ciências Contábeis (PPGCC/UFSM), Santa Maria/RS, Brasil  
marcia.nascimento17@hotmail.com  
<https://orcid.org/0000-0002-9771-3175>

**Larissa Degenhart**

Doutora em Ciências Contábeis e Administração (FURB)  
Professora do Programa de Pós-graduação em Ciências Contábeis PPGCC (UFSM), Santa Maria/RS, Brasil  
larissa.degenhart@ufsm.br  
<https://orcid.org/0000-0003-0651-8540>

**Vinícius Costa da Silva Zonatto\***

Pós-Doutor em Ciências Contábeis (UNISINOS)  
Doutor em Ciências Contábeis e Administração (FURB)  
Professor do Programa de Pós-Graduação em Ciências Contábeis PPGCC (UFSM), Santa Maria/RS, Brasil  
viniciuszonatto@gmail.com  
<https://orcid.org/0000-0003-0823-6774>

**Marcelo Trevisan**

Doutor em Administração (UFRGS)  
Professor do Programa de Pós-Graduação em Ciências Contábeis PPGCC (UFSM), Santa Maria/RS, Brasil  
marcelotrev@gmail.com  
<https://orcid.org/0000-0002-2403-7970>

**Primary mailing address\***

Av. Roraima, nº 1000, Cidade Universitária, CESH, Prédio 74C, Sala 4345, 3º Andar, Bairro Camobi, CEP: 97105-900, Santa Maria/RS, Brasil

### Abstract

This study analyzes the effects of information sharing, occupational stress and job insecurity on the relationship between the participation and the commitment to budget goals. A descriptive survey with a quantitative approach, using structural equation modeling (SEM) was carried out with the participation of 166 controllers from industrial organizations. The results indicate that budget participation enhances information sharing, but does not have a direct positive and significant influence on commitment to budget goals. This is determined by the levels of vertical information sharing between superiors and subordinates. The results also show that higher levels of occupational stress increase levels of job insecurity. However, they are not enough to have a negative impact on controllers' commitment to the budget goals set. It can be concluded that information sharing is an important intervening variable in reducing levels of occupational stress and job insecurity, and is a determining factor in positively influencing controllers' commitment to the established budget goals. This study contributes to the management accounting literature by providing new insights into a complex process that goes beyond budgetary control and information sharing, revealing how such interactions reflect on the commitment of controllers to their work tasks and goals, in the face of the institutional pressures that exist to fulfill them.

**Keywords:** Budget Participation; Information Sharing; Occupational Stress; Job Insecurity; Commitment to budget goals

### Resumo

Este estudo analisa os efeitos do compartilhamento de informações, estresse ocupacional e insegurança no trabalho na relação entre a participação e o compromisso com as metas orçamentárias. Pesquisa descritiva, de levantamento e abordagem quantitativa, utilizando modelagem de equações estruturais (MEE), teve a participação de 166 *controllers* de organizações industriais. Os resultados indicam que a participação orçamentária potencializa o compartilhamento de informações, porém, não exerce influência direta positiva e significativa no compromisso com as metas orçamentárias. Este é determinado pelos níveis de

compartilhamento de informações verticais existentes entre superiores e subordinados. Os resultados também revelam que maiores níveis de estresse ocupacional elevam os níveis de insegurança no trabalho. Contudo, não são suficientes para impactar negativamente no compromisso dos *controllers* com as metas orçamentárias estabelecidas. Conclui-se que o compartilhamento de informações constitui importante variável interveniente para a redução dos níveis de estresse ocupacional e insegurança no trabalho, sendo determinante para influenciar positivamente o comprometimento dos *controllers* com as metas orçamentárias estabelecidas. Este estudo contribui para literatura de contabilidade gerencial fornecendo novos *insights* sobre um processo complexo que vai além do controle orçamentário e do compartilhamento de informações, revelando como tais interações refletem no compromisso de *controllers* com as tarefas e metas de trabalho, diante das pressões institucionais existentes para o seu cumprimento.

**Palavras-chave:** Participação Orçamentária; Compartilhamento de Informações; Estresse Ocupacional; Insegurança no Trabalho; Compromisso com as Metas Orçamentárias

## Resumen

Este estudio analiza los efectos del intercambio de información, el estrés laboral y la inseguridad en el empleo sobre la relación entre la participación y el compromiso con los objetivos presupuestarios. Se llevó a cabo una encuesta descriptiva con un enfoque cuantitativo, utilizando modelos de ecuaciones estructurales (SEM) en la que participaron 166 controladores de organizaciones industriales. Los resultados indican que la participación en el presupuesto mejora el intercambio de información, pero no tiene una influencia directa positiva y significativa en el compromiso con los objetivos presupuestarios. Esto viene determinado por los niveles de intercambio vertical de información entre superiores y subordinados. Los resultados también muestran que los niveles más altos de estrés laboral aumentan los niveles de inseguridad en el trabajo. Sin embargo, no son suficientes para influir negativamente en el compromiso de los controladores con los objetivos presupuestarios fijados. Concluimos que compartir la información es una importante variable interveniente en la reducción de los niveles de estrés laboral y de inseguridad en el trabajo, y es un factor determinante para influir positivamente en el compromiso de los controladores con los objetivos presupuestarios establecidos. Este estudio contribuye a la bibliografía sobre contabilidad de gestión aportando nuevas perspectivas sobre un proceso complejo que va más allá del control presupuestario y el intercambio de información, revelando cómo tales interacciones se reflejan en el compromiso de los controladores con las tareas y objetivos laborales, frente a las presiones institucionales existentes para cumplirlos.

**Palabras clave:** Participación en el presupuesto; Información compartida; Estrés laboral; Inseguridad laboral; Compromiso con los objetivos presupuestarios

## 1 Introduction

The budget can be observed as a management control instrument used by organizations to communicate objectives, goals and motivation of employees (Dorfuss, 2016; Welsh et al., 2020), with the participation of individuals in the budget process being an important element of analysis and comprehension of the effects of the budget on the individual's mental states and behavior at work, their attitudes and their performance in budgetary (Dani et al., 2017; Weiskirchner-Merten, 2020).

Budgetary participation is related to the involvement of managers in the definition of budgetary goals and objectives and their influence on the definition of the (Milani, 1975), thus generating motivation in individuals to engage in the company's goals and objectives, modifying the perception of work, through cognitive mechanisms (Dorfuss, 2016). As an organizational management practice, the budget is established to support manager's behavior (Macinati et al., 2016), which has led to literature addressing the benefits of participation (Birnberg et al., 2007) regarding certain variables such as manager's commitment to established budget goals (Bernd et al., 2022; Grodt et al., 2023) and managerial performance (Machado et al., 2022; Piccinin et al., 2022).

For that, psychological variables associated with the individual are fundamental to explaining their attitudes and performance in work related to the budgetary context (Macinati et al., 2016; Zonatto et al., 2020). However, there are few studies dedicated to investigating aspects related to the tensions that exist in the work environment and their impact on the insecurity perceived by individuals in relation to it. Likewise, possible mitigating factors for the negative consequences of such variables on individuals' behavior at work, a theoretical gap explored in this research.

Occupational stress is related to individuals' perception of working conditions perceived as not being adequate to what they need to carry out their tasks (Paschoal & Tamayo, 2004; Prabhakaran & Rajandran, 2019). It can have a physical, psychological or psychosocial origin, being defined as pressure imposed on the individual (Selye, 1956). In the budgetary context, it is related to the effects of such perceptions on attitudes, behaviors and the manager's performance in their work activities (Shields et al., 2000; Zonatto et al., 2019).

Due to such pressures, it is also possible to identify the insecurity of these professionals in the work performed, as well as in their permanence in the organization. This occurs when employees feel threatened with losing their job, which causes stress, and can lead negative individual and organizational outcomes (Gallie

et al., 2017; Shoss, 2017; Lee et al., 2018; Sora et al., 2018). Organizational scholars have found that individuals who feel fear of losing their job tend to have low organizational commitment, performance job satisfaction, and higher occupational stress (Kausto et al., 2005; Ma et al., 2019; Richter & Naaswall, 2019).

Although it appears that budgetary participation can generate a positive effect on individuals' attitudes and behaviors at work, when adequate budgetary control mechanisms are employed, there is evidence found in the literature that suggests that it may not exert a direct and significant influence on these variables, with need to identify the possible effects of other intervening variables (Cheng, 2012; Derfuss, 2016; Machado et al., 2022). In the case of this research, it is proposed that, in addition to budgetary participation, it is necessary to share information between superiors and subordinates, so that work plans, objectives, goals and allocated resources can be managed appropriately.

Therefore, it is believed that interaction between budgetary participation and information sharing are factors that can mitigate the possible negative effects of occupational stress and job insecurity, improving managers' commitment to established budgetary goals. By stimulating interaction between managers and their employees, information sharing is promoted (Shields & Shields, 1998; Parker & Kyj, 2006; Lunardi et al., 2020), which improves that commitment of these professionals to the tasks to be performed carried out. In this way, it is possible that, under these conditions, these individuals feel that have received great organizational support and become more resilient to act in search of achieving the expected results (Machado et al., 2022; Grodt et al., 2023).

Since such relationships were not evaluated under the configuration proposed in this study, this research seeks to answer the following problem question: What are the effects of information sharing, occupation stress and job insecurity on the relationship between participation and commitment to goals? The central objective of this research is to analyze, in a sample of professional controllers from industrial organizations operating in Brazil, the intervening effects of information sharing, occupational stress and job insecurity in relationship between budgetary participation and commitment to budgetary goals.

The choice of professional controllers from industrial companies operating in Brazil is because these professionals have a broad perception of the budgetary context and the management processes established in these organizations, constituting an important manager who supports the organization's management processes (Palomino & Frezatti, 2016). The choice of organizations in the industrial sector is based on their propensity to adopt formal management practices and use the budget to evaluate performance (Machado et al., 2022).

The research is justified by the inclusion of theoretical perspectives from psychology, as it offers researchers the opportunity to develop more complete and valid explanations of the budgeting practices in organizations (Covalleski et al., 2007; Hall, 2008; Machado et al., 2022), being relevant to any accounting practice (Birnberg et al., 2007). Understanding the effects of information sharing, occupational stress and job insecurity on the relationship between budgetary participation and commitment to budgetary goals is necessary in management research carried out in the accounting area, to contribute to the evolution of organizations and the understanding of factors predictors of achieving desired organizational results.

Thus, the analysis of these factors can reveal to superiors the potential that information sharing has to develop mental states and positive strengths in employees, so that they can successfully carry out challenging tasks in the budgetary context (Venkatesh & Blaskovich, 2012) and prove themselves committed to these (Machado et al., 2022; Piccinin et al., 2022). Likewise, so that one can understand their roles in reducing levels of occupational stress and the insecurity of individuals in the work performed, which will reflect in greater commitment to the established goals. In this way, the proposed research also contributes to organizations in identifying the design of the budget control system to be adopted, with a view to enhancing attitudes and behaviors in relation to the budget.

Therefore, understanding whether and what effects may exist regarding information sharing, occupational stress and job insecurity in the relationship between budgetary participation and commitment to goals constitutes an important theoretical contribution of this study. Furthermore, it contributes to researchers interested in better understanding the theoretical perspective of this research gap, providing more complete and did explanations of budgeting practices in organizations and the effects of information sharing on important organizational stressors.

These are relevant implications of the research, which contribute to the production of new knowledge on the topic. The research also contributes to controllers and researchers interested in the topic, providing new evidence of the mitigating effects of information sharing on occupational stress and job insecurity. According to Palomino e Frezatti (2016), findings on such effects in a specific sample of managers in the area of controlling, an important organizational unit to support management are incipient.

## **2 Theoretical Basis and Research Hypotheses**

### **2.1 Budget participation, information sharing and commitment to goals**

Over the past three decades, researchers have extensively examined whether employee involvement and influence on their budget goals makes them work more effectively. Despite countless research, there is no theoretical and empirical consensus on the direct link between budget participation and commitment to goals (Piccinin et al., 2022; Grodt et al., 2023). There is empirical support for the positive relationship between

employees' budget participation and their work performance (Brownell & McInnes, 1986; Chong & Johnson, 2007; Dunk, 1989; Kren, 1992).

However, based on three meta-analyses analyzed, Bonache et al. (2012) stated that, in general, the direct link between participation in determining budgetary resources and work performance is not significant. These findings, although conflicting, do not imply disregarding the importance of involving employees in budgetary decisions, but suggested that the link between budgetary participation and work performance depends an intervening variable.

In the case proposed in this research, proactive managerial attitudes and behaviors (Zonatto et al., 2020), which improve information sharing (Lunardi et al., 2020) and commitment to budgetary goals (Chong & Johnson, 2007), conditions which reflect positively on the performance of managers who have budgetary responsibility in their work assignments. According to Welsh et al. (2020), individuals' commitment to a goal, in general, tend to be motivated to avoid failure in achieving that goal. Therefore, they act to align objectives, goals and resources, in order to create a work environment favorable to achieving these goals. For this reason, they become more likely to share information relevant to work (Machado et al., 2022).

This occurs because the socialization of such information improves the quality of the entity's budget management processes, positively reflecting on better-perceived organizational support and performance (Machado et al., 2022). This factor demonstrates the relevance of approaching the cognitive processes that motivate the behavior of individuals in the budgetary context (Welsh et al., 2020), prone to generating information that adds to the entity's management processes, given the consequent benefits that can be achieved.

Evidence found in the literature reveals that higher levels of budget participation are associate with positive, motivational and achievement value effects (Machado et al., 2022). This is because, when participating in budget processes, individuals feel recognized and valued (Chong & Chong, 2002), and, therefore, prone to sharing private information that they have (Lunardi et al., 2020). For these reasons, sharing information improves the organizational capacity to allocate resources, as well as allowing for better alignment between objectives and established budgetary goals. Therefore, it acts to enhance the controllers' commitment to the established budgetary goals (Piccinin et al., 2022; Grodt et al., 2023). In this context, the first hypothesis tested in this research establishes that: **H1. There is a positive relationship between budget participation and information sharing.**

As a result of the better allocation of budgetary resources, there is na expectation of greater organizational support and the perception of greater chances of achieving the desires results, which reflects on the cognitive benefits of the budgetary process, in terms of information sharing (Chong & Chong, 2002; Chong & Johnson, 2007), and availability of relevant information about the work to be carried out (Leach-López et al., 2007; 2009; Machado et al., 2022). Commitment to the budget goals refers to the determination to strive for budget and perseverance in pursuing it over time (Locke et al., 1988). Therefore, the allocation of adequate resources and the possibility of qualifying organizational communication, through budgetary participation, acts to promote this commitment (Welsh et al., 2020; Piccinin et al., 2022; Grodt et al., 2023).

This occurs because the expected results arise from the establishment of goals, their acceptance and commitment (Grodt et al., 2023). Therefore, they arise from cognitive processes, which induce human action, in the search for achieving such objectives (Welsh et al., 2020). These aspects demonstrate the relevance of budgetary participation, as a means of promoting organizational communication established in the budgetary context and for formalizing managers' commitment to defined budgetary goals (Berndt et al., 2022; Piccinin et al., 2022; Grodt et al., 2023).

Evidence found in the literature has suggested a positive relationship between budgetary participation and organizational commitment (Locke et al., 1988; Rhodes & Steers, 1981). Supported by goal-setting theory, it is proposed that employee participation in budget decision making increases their commitment to established budget goals (Piccinin et al., 2022; Grodt et al., 2023). Goal setting theory advocates that goals are human intentions, which regulate their subsequent behaviors or actions (Locke & Latham, 2006).

In this sense, when employees become involved in the budgeting process, they can feel a sense of ownership of the budget and these feelings of control can increase their commitment to achieving these desired results (the established budget goals). The positive relationship between these variables, found in some studies carried out in the accounting area (Jermias & Yigit, 2012; Nouri & Parker, 1998; Quirin et al., 2000), denotes that a higher level of employee commitment can result in greater motivation, which in turn leads to better job performance (Piccinin et al., 2022; Grodt et al., 2023). For this reason, the promotion of behavior becomes relevant (Berndt et al., 2022).

In the context of budget setting, according to this theory, once employees are committed to budget goals, they will increase the efforts required to achieve those goals. This means that employees who are committed to their budget goals will try harder and persist over time, resulting in them being more effective than less committed employees (Chong & Johnson, 2007). On the other hand, the lack of participation in the organization's budgetary processes makes these managers start to imagine what their results would be like if there were the opportunity to participate in the company's budgetary discussions (Magner et al., 1995; Kyj & Parker, 2008). Based on the above, the second research hypothesis established that: **H2. There is a positive relationship between budget participation and commitment to goals.**



Studies presents evidence that sharing vertical information is important for organizational commitment (Parker & Kyj, 2006; Machado et al., 2022). Internal communication between managers and employees can evolve them in the organization, increasing their engagement at work (Mishra et al., 2014; Machado et al., 2022). Unit managers have relevant private information from their daily lives, which when shared and considered, can qualify the budget definition and resource allocation process (Lunardi et al., 2020; Zonatto et al., 2022).

The organizational context requires its actors to engage in transparent dialogue, essential for good relationships, and which allows reciprocal access to information (Pinna et al., 2020). Sharing information allows superiors to help develop better strategies for subordinates, increasing their individual performance (Murray, 1990; Parker & Kyj, 2006; Lunardi et al., 2020).

Regarding the effects of budgetary configuration on information sharing, Kyj e Parker (2008) e Lunardi et al. (2020) indicated that the exchange of information in the budget processes is beneficial for the organization, since, by actively participating in the budget processes, subordinates can share private information with their superiors, which in a better-defined budget for their organization. Unit of responsibility, as well as for a global budget that is appropriate to the reality and needs of the organization (Lunardi et al., 2020; Magner et al. 1996; Nouri & Parker, 1998; Shields & Shields, 1998).

Therefore, under conditions of higher levels of participation in budgetary processes, information sharing becomes more likely to occur, which allows us to establish third research hypothesis: **H3. There is a positive relationship between information sharing and commitment to goals.**

## 2.2 Budget participation, occupational stress and job insecurity

The term occupational stress indicates a syndrome of adaptation to a group of harmful reactions acting on the organization or individual by an external force. It reveals pressure, anguish and tension (Ursin & Eriksen, 2004; Lee et al., 2018; Prabhakaran & Rajandran, 2019). Emotional factors tend to impact individuals' behavior at work (Zonatto et al., 2019). Thus, situations that generate high levels of insecurity, initiation and anxiety tend to negatively impact the degree of effort that the individual is willing to undertake in their work activities, which may result in loss of productivity and quality of the activities carried out (Shields et al., 2000; Zonatto & Lavarda, 2013).

This occurs because stress symptoms can be rooted in physical, psychological or behavioral concepts, being a universal component also presents in organizations (Lee et al., 2018; Prabhakaran & Rajandran, 2019), which affect actions of individuals in a context of social interaction, such as the work environment and budgetary processes established in the organization (Schlup et al., 2021). When present, its symptoms and impacts tend to reflect negatively on individual and organizational results (Prabhakaran & Rajandran, 2019; Shaholli et al., 2023), resulting in productivity losses, absenteeism, illness and professional absence from work (Shaholli et al., 2023).

However, it is important to consider that stressors can affect, positively or negatively, the performance of managers in the work performed (Cavanaugh et al., 2000; Mackie, Holahan & Gottlieb, 2001), depending on the individual's response to the stressful stimulus experienced (Selye, 1956). Stress may not only be a harmful process for the individual, as it can also enable growth, pleasure, intellectual and emotional development (Pereira et al., 2003). In the budgetary context, the evidence found suggests that higher levels of budgetary participation can mitigate the negative effects of occupational stress (Zonatto & Lavarda, 2013; Schlup et al., 2021), but not necessarily eliminate the problems of stressors identified as a result of the existence of role ambiguity and conflict (Zonatto et al., 2019).

This is because budgetary participation contributes to the definition of appropriate organizational support strategies, in the fact of adverse situations experienced, which can contribute to promoting the resilience and perseverance of managers, in the search for achieving better results (Schlup et al., 2021). In this way, considering that budgetary participation acts to promote organizational communication and adequate budgetary support, in order to improve the allocation of resources, given the existing organizational and sectoral needs and demands, it appears, in the fourth research hypothesis, which: **H4. There is a negative relationship between budgetary participation and occupational stress.**

It is expected that established communication (Parker & Kyj, 2006), improving resources allocation (Lunardi et al., 2020) and controllers' commitment to determined budgetary goals (Chong & Johnson, 2007; Piccinin et al., 2022; Grodt et al., 2023), reduce the levels of organizational tensions related to managers' work assignments. Therefore, arising from the established organizational support (Lee et al., 2018; Prabhakaran & Rajandran, 2019), act to mitigate its potential consequent negative effects (Shaholli et al., 2023).

Since situations that generate high levels of insecurity, initiation and anxiety tend to negatively impact the degree of effort that the individual is willing to undertake in their work activities (Lee et al., 2018; Prabhakaran & Rajandran, 2019), which could result in loss of productivity and quality of activities carried out by the manager (Shields et al., 2000; Zonatto & Lavarda, 2013; Shaholli et al., 2023), this should also contribute to increasing levels of tension, insecurity and intention not to stay at work (Lee et al., 2018; Schlup et al., 2021; Shaholli et al., 2023).

This is because tiredness, dissatisfaction and exhaustion inhibit the mobilization of cognitive and motivational resources, which encourage the individual to make greater efforts to achieve such results (De

Cuyper et al., 2011; Llosa et al., 2020). Acceptance of such working conditions also implies passive, accepting behavior, not committed to work assignments, which can result in loss of productivity and lack of interest in organization (De Cuyper et al., 2011; Llosa et al., 2020). This set of perceived stressors can result in greater job insecurity (Llosa et al., 2020; Shaholli et al., 2023), which explains such actions.

For these reasons, it is important to adopt management practices capable of enhancing positive cognitive aspects of individuals (Venkatesh & Blaskovich, 2012; Schlup et al., 2021), capable of contributing to their resilience, and coping with adverse tensions of the work environment. The participatory budget configuration, by promoting information sharing (Lunardi et al., 2020; Machado et al., 2022) and commitment to budget goals (Chong & Johnson, 2007; Welsh et al., 2020; Berndt et al., 2022), works to enhance the engagement of individuals at work, so that they can act in the search for better performance (Lunardi et al., 2020; Grodt et al., 2023).

In this way, it is possible to admit that high levels of budgetary participation, by enhancing information sharing and resource allocation, may be able to reduce job insecurity, and result in lower levels of occupational stress, and better managerial performance (Shields et al., 2000; Parker & Kyj, 2006; Zonatto & Lavarda, 2013; Schlup et al., 2021). In this context, the fifth research hypothesis establishes that: **H5. There is a negative relationship between budget participation and job insecurity.**

### 2.3 Information sharing, occupational stress and job insecurity

Work related stress, known as occupational stress, is area of study that analyzes working conditions, as well as its consequences for the individual's health and development (Hurrell & Sauter, 2011; Lee et al., 2018; Prabhakaran & Rajandran, 2019). It results from an inadequate ability to deal with sources of stress present in work contexts, resulting in mental, physical and organizational illnesses. It worsens when the individual perceives that he or she has responsibilities, at the same time, has little possibility of autonomy control.

High stress situations can result in illness at work (Llosa et al., 2020; Shaholli et al., 2023). Wang and Patten (2001) explain that the greater the occupational stress, the more symptoms of depression individuals present. When this occurs, according to Ford et al. (2015), the individual will prioritize their actions to deal with the most relevant task in their perception and needs, thus demanding time and effort. as the disease does not only come with limitations of reduced physical effort, but also with a cost of care for the individual, in this case, the treatment of the disease itself.

Therefore, the manager, realizing that the organization cares about him, increases existing interpersonal and organizational trust (Zonatto et al., 2022). This condition causes their perception of work stressors to be seen as a new challenge in carrying out their tasks (Pereira et al., 2003; Schlup et al., 2021). The organizational context demands that its actors engage in transparent dialogue, which is essential for a good relationship and which allows reciprocal access to information (Pinna et al., 2020).

This context of information exchange is beneficial for the organization (Shields & Shields, 1998; Parker & Kyj, 2006), since personal and organizational success depends, at least in part, on the subordinate receiving budgetary support in an efficient manner adequate (Nouri & Parker, 1998), a condition that increases their ability to deal with adverse situations and challenges faced (Schlup et al., 2021; Machado et al., 2022), and raises the level of budgetary commitment of managers, in the search for achieving the best results (Piccinin et al., 2022; Grodt et al., 2023). In this context, it is assumed that under conditions of greater budgetary participation, there will be greater sharing of information, as the informative roles of the budget favor organizational communication (Lunardi et al., 2020), which will act to reduce levels of uncertainty and tensions related to work. In this context, the sixth research hypothesis establishes that: **H6. There is a negative relationship between information sharing and occupational stress.**

Economic, social and psychological turmoil (Goodell, 2020; Kuckertz et al., 2020) leads individuals to face more acute levels of job insecurity (Hamouche, 2020), which can result in lower engagement (Saks, 2006). This occurs when such aspects negatively influence the organization. In this case, managers who have budgetary responsibility are pressured for better results, at the same time, as there is a need to better manage available resources (Schlup et al., 2021). This condition can result in loss of autonomy and motivation for work (Baerdemaeker & Bruggeman, 2015). Motivation is one of the aspects that can help managers mobilize resources (cognitive and emotional) to have a more positive behavior with the budgeting process (Wafiroh et al. 2020), which reflects in the acceptance of the prepared budget and its subsequent execution (Wafiroh et al., 2020; Grodt et al., 2023).

In this scenario, sharing vertical information can provide greater interaction between managers and employees (Parker & Kyj, 2006; Lunardi et al., 2020), allowing a better understanding of the environment conditions faced, which gives them new knowledge and promote their capacity (effectiveness) to deal with such a situation (Machado et al., 2022). Likewise, so that the organization can act to align objectives, goals and resources given the definition or need to (re)align action strategies. Therefore, whether through financial or non-financial information (Macinati et al., 2016), the qualification of budget management processes improves managers' commitment to the objectives of using the budget (Welsh et al., 2020), which stimulates their commitment in the search for these results (Piccinin et al., 2022; Grodt et al., 2023). Such conditions contribute to minimizing insecurity and promoting engagement at work (Baker, 2020; Frare & Beuren, 2020).

As well as contributing to the reduction of work stressors (Schlup et al., 2021), sharing information allows for a greater assessment of established working conditions, which through the allocation of resources, can be assessed as adequate or not. For this reason, considering that the budget's informative papers allow for a better definition of the budgetary conditions established for the development of their tasks and work assignments (Zonatto et al., 2022), improving their commitment to the established budgetary goals (Chong & Johnson, 2007), it is possible to admit that such conditions contribute to reducing the possible negative effects of job insecurity. Thus, the seventh hypothesis tested in this research establishes that: **H7. There is a negative relationship between information sharing and job insecurity.**

## 2.4 Occupational stress, job insecurity and commitment to budget goals

According to Welsh et al. (2020), individuals' commitment to a goal, in general, tend to be motivated to avoid failure in achieving that goal and act to increase their results. This occurs because the expected results arise from settings goals, and the stimuli received in interactions established during the budget process. This factor demonstrates the relevance of approaching cognitive process, resulting from budgetary participation (Machado et al., 2022), that motivate behavior in the search for identifying which factors influence commitment to budget goals, as these factors can have critical implications in their definition (Welsh et al., 2020).

Occupational stress, as it is a complex process that occurs when there is a difference between a person's perceived ability and actual ability to manage work responsibilities (Khosravi et al., 2020), needs to be observed. In the literature on job insecurity, discussions about stress and insecurity are rooted in employees' feeling of impotence to guarantee the desired continuity in their work, because of a threatening situation (Greenhalgh & Rosenblatt, 1984; Lee et al., 2018; Prabhakaran & Rajandran, 2019).

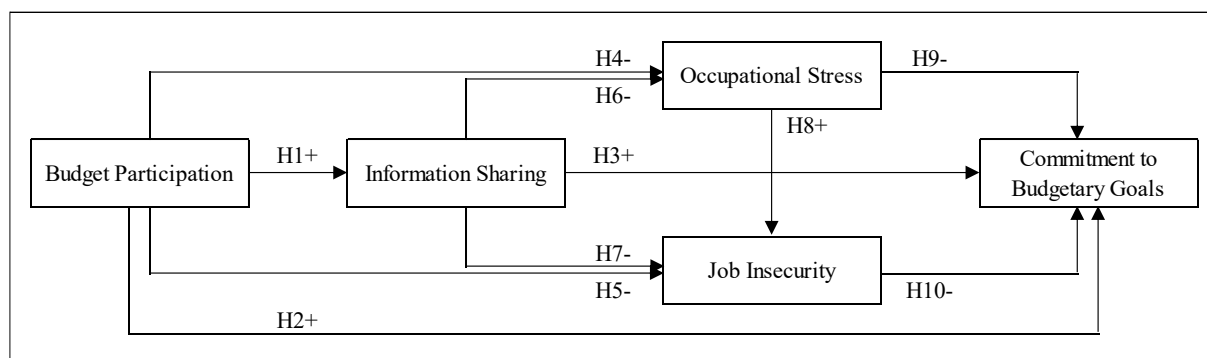
Because they consist of elements that negatively affect the behavior of individuals at work, they are positively associated (Shoss, 2017). This is because both acts to reduce the levels of motivation, engagement and commitment of individuals to the work performed (Ali et al., 2020; Guarnaccia et al., 2018; Karatepe et al., 2020; Stander & Rothmann, 2010). Thus, when present, increased levels of occupational stress and job insecurity can result in losses for the organization, resulting from increased operational costs, loss of productivity, absence from work or the intention of not staying there (Llosa et al., 2020; Shaholli et al., 2023). For the reasons, the eighth research hypothesis established for the study advocates that: **H8. There is a positive relationship between occupational stress and job insecurity.**

Given these concepts, it appears that both variables (occupational stress and job insecurity) are negatively related to commitment to budgetary goals. Negative reactions associated with job insecurity have been widely documented (Jiang & Probst, 2019; Wang et al., 2018; Shoss, 2017), indicating less commitment and effort to the work performed (Llosa et al., 2020; Shaholli et al., 2023). Job insecurity affects emotional states, compromises the well-being and health of employees, and deteriorates satisfaction and commitment to goals (Schlup et al., 2021). Therefore, it is one of the consequences of the effects of work stressors, which negatively affect the quality of managerial performance (Shaholli et al., 2023).

The causes of stress at work arise from the perception of job insecurity, high job demands in relation to the worker's skills, lack of resources, professional relationship with colleagues (not satisfactory), salary below expectations, lack of participation in decision making decisions, lack of control over the work performed, excessive assignments and responsibilities, along with little assigned authority, inadequate job descriptions and management styles (Firth-Cozens, 1999; Healy & McKay, 2000; Hughes et al., 2009; Oginska-Bulik, 2006; Schmitz et al., 2000). Such stressors, in addition to attenuating managerial performance, can cause harmful effects on the individual on their physical, mental and emotional health and well-being (Mosadeghrad et al., 2011; Llosa et al., 2020; Schlup et al., 2021).

In this context, the last two hypotheses investigated in this research established that: **H9. There is a negative relationship between occupational stress and commitment to budget goals;** and, **H10. There is a negative relationship between job insecurity and commitment to budget goals.**

The Figure 1 presents the synthesis of the theoretical analysis model developed for the study.



**Figure 1 - Theoretical model of analysis**

The methodological procedures used in the study are described below.

### 3 Research Method and Procedures

This study is characterizing as descriptive research, carried out through survey and quantitative data approach. It is characterizing as descriptive research, as it seeks to describe the effects of information sharing, occupational stress and job insecurity on the relationship and commitment to budgetary goals. This is survey research, as this was the data collection technique used to achieve it, with predominantly quantitative analysis, using Structural Equation Modeling (SEM).

With the help of the LinkedIn® network of professional contacts, and the search for the term controller, 1.220 invitations were select and sent to professionals who work in this role. The search initially occurred based on the selection of professional controllers from industrial companies operating in Brazil, considering the sector position in the selected company. Among the invitations sent, 858 invitations were accepted and a valid response rate of 19, 35%, which resulted in 166 completed and used questionnaires, which make up the non-probabilistic sample analyzed in this research.

The population chosen for this study comprises controllers from industrial companies operating in Brazil. These professionals are managers who support the process of structuring the management control system (Palomino & Frezatti, 2016). Therefore, they are professionals who make the connection between senior managers (Machado et al., 2022). Thereby individuals are suitable to answer the questions created to carry out this research, given the purposes established for the study. It chose if to analyze industrial organizations, as these companies use the budget as a management tool, as well as to evaluate the performance of managers who have budgetary responsibility. Furthermore, industrial organizations are Institutions more likely to adopt a formal structure of management controls (Machado et al., 2022).

The sample analyzed in the research is predominantly made up of male professionals (84, 94%), with a predominant age range of 31 to 50 years (74, 70%), higher education and specialization (71, 08%), and working time in the role of up to 10 years (81, 93%). The hierarchical level of your role is considered high (5, 84), as is the level of used of budget for performance evaluation (5, 80), on a scale of up to 7 points. The data from the research carried out were collect through a questionnaire administered in electronic form, from April to July 2022.

The measurement instruments for the constructs selected for the research used a seven-point Likert scale, which sought to evaluate the level of agreement of research participants in relation to each statement presented, with "1" meaning total disagreement (maximum) and "7" total agreement (maximum). Table 1 presents the synthesis of the research constructs.

**Table 1**  
*Constructs and operational definition*

Constructs	Operational definition	Indicators/Scale	Authors
Budget participation (BP)	Evaluates the involvement of professionals in defining the budget of their unit of responsibility.	6 indicators Likert 7points	Milani (1975)
Information sharing (IS)	Evaluate the level of vertical information sharing between sênior managers and subordinates.	3 indicatorss Likert 7points	adapted from Parker and Kyj (2006)
Commitment to budget goals (CBG)	Evaluates managers' commitment to established budgetary objectives and targets.	4 indicatorss Likert 7points	adapted from Chong & Chong (2002)
Occupational stress (OS)	Evaluates the levels of occupational stress perceived by the manager in their work activities.	11 indicators Likert 7points	Paschoal and Tamayo (2004)
Job insecurity (JI)	Evaluates the levels of job insecurity perceived by the manager in their work activities.	4 indicators Likert 7points	Witte (2000)

The costructs presented in Table 1 be used in other studies developed on the topic, which indicates their suitability. Even so, it was validated by experts, two teachers/researchers, PhDs in Accounting Sciences and three controllers, to evaluate its clarity and suitability for the purposes of the research. Since no changes were recommend, its proposed version was use for data collection. As ethical procedures adopted, the research Project was registered with the Research Ethics Committee of the authors' institution (Opinion nº 5.101.241), as well as the recommended ethical procedures were adopted.

The collected data were tabulate and analyze with a statistical approach, using structural equation modeling (SEM), in accordance with the analysis procedures proposed by Hair Jr. et al. (2019). This technique used to analyze data and test hypotheses, estimated from Partial Least Squares (PLS). It makes it possible to estimate a series of separate but interdependent multiple regression equations simultaneously, by specifying the structural model (Hair Jr. et al., 2019). Initially, a descriptive analysis of the data was carried out, evaluating the minimum and maximum values, the average and the standard deviation of the responses obtained.

Next, the reliability indicators (Cronbach's Alpha, Compositive Reliability and AVE) of the measurement constructs and their discriminant validity were analyze, in accordance with the analysis criteria proposed by Fornell and Larcker (1981). Next, through validation of the structural model, the commom method



bias test was analyzed, as proposed by Podsakoff et al. (2003). Finally, the significance of the tested relationships was inferred (Hair Jr. et al., 2019). The results found were present below.

## 4 Search Results

### 4.1 Validation of measurement constructs

Table 2 presents a summary of the results of the measurement model tested in the research, which allows inferences about the descriptive statistical analysis, reliability and discriminant validity of the constructs (Hair Jr. et al., 2019).

**Table 2**

*Descriptive statistics, reliability and discriminant validity*

Variable	Actual range	Average	Standard Deviation	Factor Loadings	Cronbach's Alpha	Composite reliability	AVE
BP	1.00 - 7.00	6.19	1.16	[0,753; 0,806]	0.878	0.907	0.620
IS	1.00 - 7.00	5.92	1.27	[0,874; 0,912]	0.874	0.923	0.799
OS	1.00 - 7.00	5.67	1.57	[0,785; 0,906]	0.918	0.936	0.709
JI	1.00 - 7.00	5.04	1.84	[0,862; 0,937]	0.918	0.941	0.798
CBG	1.00 - 7.00	5.92	1.06	[0,723; 0,926]	0.919	0.940	0.759
Discriminant validity (Fornell e Larcker, 1991)							
Variable	BP	IS	OS	JI	CBG		
BP	<b>0.788</b>						
IS	0.659	<b>0.894</b>					
OS	-0.137	-0.152	<b>0.842</b>				
JI	-0.133	-0.069	0.239	<b>0.894</b>			
CBG	0.398	0.473	-0.192	-0.074	<b>0.871</b>		

Note: Budget participation (BP), Information Sharing (IS), Occupational stress (OS), Job Insecurity (JI), Commitment to Budget Goals (CBG).

The results of the descriptive data analysis reveal minimum and maximum responses on the scale used, indicating that, in the sample analyzed, not all controllers realize their influence in defining the budget of their unit of responsibility. Likewise, they reveal that some professionals do not perceive the sharing of information between superiors and subordinates in their work unit, as well as not being committed to the established budgetary goals.

These results reinforce the evidence found that indicates a high level of agreement regarding the existence of occupational stressors in the work environment, and the report by some professionals of fear for their jobs. This evidence reinforces the importance of analyzing such relationship, so that one can better understand their interactions and effects on the commitment of these managers to the established budgetary goals, which, to some extent, will reflect on the desired organizational results.

According to Lavarda and Almeida (2013), budget participation alone is not capable of alleviating existing problems of informational asymmetry. Likewise, according to Zonatto et al. (2019), budget participation may not be able to eliminate existing occupational stress problems. This is because the tensions in the work environment are inherent to the existing pressures to achieve objectives, goals and expected results. Therefore, in some way, they reflect on attitudes behaviors and managerial performance (Lunardi et al., 2020). It is for these reasons that managing such tensions is necessary, so that the workforce and managers' commitment to the desired results can be maintain.

Regarding the validation of measurement constructs, it is noted that the structural model presents statistical viability and reliability. The factor loadings of the indicators for each construct are greater than 0, 7 in all constructs analyzed. Cronbach's alpha coefficient and the composite reliability of the measurement constructs present values greater than 0.70 for all cases, with the average variance extracted (AVE) also greater than 0, 5 (Hair Jr. et al., 2019). The structural model tested also presents discriminant viability, based on the Fornell-Larcker (1981).

Regarding the method bias test, the set of indicators analyzed were grouped into 5 different factors, with the first factor explaining only 29,605% of the total variance explained, which indicates the non-existence of method bias (Podsakoff et al., 2003). In this way, it becomes possible to infer the theoretical relationships investigated in the research, which be presented below.

### 4.2 Discussion of Results

The analysis of the results presented in Table 3 supports four hypotheses investigated in the research, revealing that the effects of budgetary participation on commitment to budgetary goals (H2) occur indirectly, being influenced by existing levels of information sharing (BP→IS→CBG). Budgetary participation improves established organizational communication, enhancing the sharing of vertical information, which allows the alignment of objectives, goals and allocation of resources (Parker & Kyj, 2006; Lunardi et al., 2020) evidence that supports the first research hypothesis: H1. There is a positive relationship between budget participation

and information sharing, and the interactions between budget participation, information sharing and commitment to budget goals (BP→IS→CBG).

**Table 3**

*Standardized coefficients and significance of the relationships of the tested structural model*

Direct effects										
Hip.	Structural path	Stand. coeffic.	Stand. error	t-Statistics	p-values	Result	Max. VIF	R <sup>2</sup>	Q <sup>2</sup>	f <sup>2</sup>
H1	BP → IS	0.659	0.084	7.896	0.000	Supported	1.000	0.435	0.336	0.569
H2	BP → CBG	0.145	0.121	1.197	0.232	Not Sup.	1.795	0.251	0.183	0.637
H3	IS → CBG	0.360	0.092	3.912	0.000	Supported	1.795	0.251	0.183	0.637
H4	BP → OS	-0.065	0.083	0.777	0.437	Not Sup.	1.769	0.025	0.014	0.586
H5	BP → JI	-0.140	0.092	1.521	0.129	Not Sup.	1.782	0.069	0.038	0.646
H6	IS → OS	-0.109	0.083	1.315	0.189	Not Sup.	1.769	0.025	0.014	0.586
H7	IS → JI	0.058	0.101	0.569	0.569	Not Sup.	1.782	0.069	0.038	0.646
H8	OS → JI	0.228	0.082	2.785	0.006	Supported	1.782	0.069	0.038	0.646
H9	OS → CBG	-0.118	0.062	1.900	0.058	Supported	1.795	0.251	0.183	0.637
H10	JI → CBG	-0.001	0.076	0.019	0.985	Not Sup.	1.795	0.251	0.183	0.637
Specific indirect effects										
Structural path				Stand. coeffic.	Stand. error	t-Statistics	p-values	Result		
BP → IS → JI				0.038	0.069	0.549	0.583	Not Supported		
BP → IS → OS				-0.072	0.055	1.304	0.193	Not Supported		
BP → IS → CBG				0.237	0.082	2.901	0.004	Supported		
BP → IS → JI → CBG				-0.000	0.006	0.009	0.993	Not Supported		
BP → IS → OS → CBG				0.008	0.009	0.953	0.341	Not Supported		
BP → IS → OS → JI				-0.016	0.015	1.082	0.280	Not Supported		
BP → IS → OS → JI → CBG				0.000	0.002	0.013	0.990	Not Supported		
BP → JI → CBG				0.000	0.014	0.015	0.988	Not Supported		
BP → OS → CBG				0.008	0.012	0.649	0.516	Not Supported		
BP → OS → INS				-0.015	0.020	0.746	0.456	Not Supported		
BP → OS → JI → CBG				0.000	0.002	0.010	0.992	Not Supported		
IS → JI → CBG				-0.000	0.009	0.009	0.992	Not Supported		
IS → OS → CBG				0.013	0.013	0.999	0.318	Not Supported		
IS → OS → JI				-0.025	0.022	1.147	0.252	Not Supported		
IS → OS → JI → CBG				0.000	0.003	0.013	0.989	Not Supported		
EST → JI → CBG				-0.000	0.019	0.017	0.986	Not Supported		
Control variables										
Structural path				Stand. coeffic.	Stand. error	t-Statistics	p-values	Result		
FHL → OS				0.062	0.084	0.738	0.461	Not Supported		
FHL → JI				0.055	0.090	0.611	0.541	Not Supported		
LBUPA → CBG				0.130	0.068	1.905	0.057	Supported		
WTF → CBG				0.078	0.096	0.812	0.417	Not Supported		

Note: BP. Budget participation, IS. Information sharing, OS. Occupational stress, JI. Job Insecurity, CBG. Commitment Budget Goals, FHL. Function Hierarchical Level, LBUPA. Level of Budget Use for Performance Assessment, WTF. Work Time in Function.

The analysis of the results presented in Table 3 supports four hypotheses investigated in the research, revealing that the effects of budgetary participation on commitment to budgetary goals (H2) occur indirectly, being influenced by existing levels of information sharing (BP→IS→CBG). Budgetary participation improves established organizational communication, enhancing the sharing of vertical information, which allows the alignment of objectives, goals and allocation of resources (Parker & Kyj, 2006; Lunardi et al., 2020) evidence that supports the first research hypothesis: H1. There is a positive relationship between budget participation and information sharing, and the interactions between budget participation, information sharing and commitment to budget goals (BP→IS→CBG).

As a result, of this improvement in organizational communication, managers have greater confidence in carrying out their work activities, and a perception of greater organizational support. This evidence is corroborated by the positive and significant relationship found between information sharing and commitment to budget goals, indicating that participation, by improving organizational communication and information sharing, positively reflects on greater commitment by managers to budget goals established (supporting H3. There is a positive relationship between information sharing and commitment to goals).

The commitment of managers to the established budgetary goals represents their commitment and propensity to act in accordance with the established resources, objectives and goals set, in the search for achieving such results. Managers who accept the established goals are more likely to adopt proactive professional behaviors, dedicating additional effort, beyond that usually employed, to achieve such results

(Locke et al., 1988; Chong & Johnson, 2007; Piccinin et al., 2022). Therefore, it is clear that you may be exposed to greater stress and fatigue as a result of such behavior (Schlup et al., 2021). However, the results achieved act as a reward and gratification mechanism, given the reward (recognition) achieved for the additional effort employed (Schlup et al., 2021; Grodt et al., 2023).

These results are corroborated by the evidence found for the analysis of the relationship between budget participation, commitment to budget goals, occupational stress and job insecurity, investigated in hypotheses H4 (BP→OS), H5 (BG→JI), H6 (IS→OS) e H7 (IS→JI), not supported. Although not statistically significant, high levels of budgetary participation and information sharing are negatively related to occupational stress, which indicates that to some extent, although stress levels are present, they are not capable of negatively affecting controllers' commitment towards the established budgetary targets. The relationship identified between commitment to goals and job insecurity also occurs in this way, being negative and not significant.

According to Paschoal and Tamayo (2004), occupational stress arises from individuals' regarding the conditions and resources available to carry out their work activities. In the descriptive analysis of the data, it was evident that some of the professionals' participation in the research perceive stress as one of the main tensions in their work environment. These are situations related to uncertainty in the tasks to be performed, the ambiguity and conflict of roles and work assignments, as well as clarity of what is expected (Palomino & Frezatti, 2016). Therefore, stressors at work (Prabhakaran & Rajandran, 2019; Lee et al., 2018; Shaholli et al., 2023).

Controllers are professionals who work to support management, being in contact with the organization's senior management, in strategic positions, and work to promote dialogue between managers at strategic and operational levels. Therefore, exposed to such institutional pressures for results (Palomino & Frezatti, 2016; Lunardi et al., 2020). Likewise, given the privileged information they have access to, they may experience high levels of job insecurity (Schlup et al., 2021). The evidence presented in Table 3 corroborates these statements, since the relationship between occupational stress and job insecurity was confirmed, supporting H8. There is a negative relationship between occupational stress and commitment to goals, as well as the relationship between job insecurity and commitment to budget goals is negative, although without statistical significance (H10).

The stress, whether of physical, psychological or psychosocial origin (Selye, 1956; Lee et al., 2018; Prabhakaran & Rajandran, 2019), in the budgetary context, affects attitudes, behaviors and performance of managers in their work activities (Shields et al., 2000; Zonatto et al., 2019; Schlup et al., 2021). Such pressures increase the levels of insecurity of these professionals, which can result in negative individual and organizational performance (De Cuyper et al., 2011; Gallie et al., 2017; Shoss, 2017; Sora et al., 2018; Llosa et al., 2020). Therefore, they need to be properly managed, so that action can be taken to reduce potential losses to the organization (Shaholli et al., 2023). Budget participation increases the conditions under which managers can act to achieve a more adequate budget, given their needs, demands and working conditions (Zonatto & Lavarda, 2013).

Therefore, they can act to, in addition to minimizing the tensions that exist in this environment (Zonatto et al., 2019; Welsh et al., 2020), provide better commitment from managers to the established budgetary goals (Bernd et al., 2022). In certain cases, stress can be considered a survival mechanism in the face of threats and challenges (Ribeiro et al., 2024). This is because individuals who experience tension and stressful situations at work mobilize resources (cognitive and motivational) to escape this situation. This condition is favorable to reducing levels of job insecurity, as it denotes individuals' ability to react to such coping (Shaholli et al., 2023). The relationship identified in this research between occupational stress and commitment to budget goals is negative, corroborating this assessment and supporting H9 (There is a positive relationship between job insecurity and commitment to goals).

Therefore, it can be inferred that this set of situational conditions experienced by these professionals in the work environment can mitigate the possible negative effects of occupational stress and job insecurity in their commitment to the established objectives, goals and budgetary results, which they can also reflect positively on desired individual and organizational results (Gallie et al., 2017; Shoss, 2017; Sora et al., 2018). This evidence reinforces the enabling cognitive effects of the informative roles of the budget and the sharing of work-relevant information, in the organization's budget management processes, as important support mechanisms for achieving better organizational results (Machado et al., 2022).

Regarding the control variables used in the model, it was found that the hierarchical level of the function does not discriminate the effects of occupational stress and job insecurity in the analyzed sample. Likewise, commitment to budgetary goals was not influenced by time working in the role. Only the level of use of the budget to evaluate controllers' performance is decisive in increasing their commitment to the established budgetary goals.

Such results denote that professionals who work at higher hierarchical levels are not necessarily more chances are to experience greater levels of institutional pressure for the desired results, which can generate greater levels of tension, stress and insecurity at work. The length of time working in the role is relevant to acquiring professional experience in the role performed and to understanding what is expected of the controller when varying out their work activities.

However, it is not necessarily relevant to determine your commitment to the established budget goals. This is enhanced when the organization defines that it will use budget information to evaluate its managerial performance. In this way, this condition tends to influence the behavior of controllers to act proactively in the search for achieving the desired organizational objectives, goals and results, since their reward will be link to the achievement of these results.

## 5 Final considerations

This study analyzed the effects of information sharing, occupational stress and job insecurity on relationship between budget participation and commitment goals. The results indicated that budget participation enhances the sharing of information; however, it does not have a direct positive influence on commitment to budget goals. This is determined by the levels of vertical information sharing between superiors and subordinates. The results found reveal that higher levels of occupational stress increase levels of job insecurity. However, they are not enough to negatively influence the controllers' commitment to the established budgetary goals.

This evidence suggests that by granting professional controllers' greater participation and involvement in the budget process, and defining the use of the budget to evaluate their performance, it becomes possible to stimulate the development of positive feelings, capable of enhancing attitudes, behaviors and performance at work, reducing occupational stress and perceived insecurity. Although the tensions of the work environment are present, in such conditions, it is not capable of negatively affecting the propensity of these professionals to act to achieve the desired results. Therefore, faced with the challenges presented, these professionals appear more engaged and committed to the objectives, goals and budgetary results previously defined by the organization.

It is concluded that information sharing is an important intervening variable for reducing levels of occupational stress and job insecurity, being a determining variable to positively influence controller's commitment to established budgetary goals, to the extent that they are able to trigger a positive motivational effect, resulting from budgetary participation and favor behaviors aimed at professional involvement in the search for desired and expected results. The use of the budget to evaluate the performance of controllers' also supports this action, being able to enhance their commitment to the established budgetary goals.

This study contributes to management and accounting literature, providing new insights into a complex process that goes beyond budgetary control and information sharing, revealing how such interactions reflect on controllers' commitment to work tasks and goals, in the face of institutional pressures existing for its fulfillment.

It was found that levels of occupational stress and job insecurity are perceived, to some extent, in the context of controllers' work. Likewise, budgetary participation done is not capable of mitigating the possible consequence of such stressors. Although participation acts promote organizational communication, it may ensure the alignment of resources, objectives and goals, according to the desire and expectations of the professional controller. Under these conditions expectations and fears of not achieving such objectives, imply greater insecurity about the work performed and the possibility of remaining in the role performed.

Organizations seek to define what is expected of their managers by seeking objectives and goals. Likewise, they use the budget as a control mechanism to evaluate their performance. In this way, failure to meet the established objectives and goals negatively influences the assessment of individual performance and consequently, can negatively influence the achievement of departmental and organizational results. Thus, through the budget, it seeks to implement a control mechanism that can, at the same time as motivating managers who have budgetary responsibility to adopt proactive functional behaviors, in the search for achieving certain results, promote the convergence of efforts to the achievement of desired organizational results.

By revealing the intervening roles of vertical information sharing, this research provides evidence that helps managers of industrial organizations understand the importance of adopting management practices capable of promoting vertical information sharing, as a way of improving resource allocation, as well as identifying and treating common problems observed in the work environment, aiming to achieve a better solution for the organization and its different actors. Individuals working in different divisional units may have private information relevant to the work to be carried out, which when communicated, can qualify planning and control process. Consequently, they can contribute to the better allocation of resources and the achievement of better organizational results.

On the other hand, failure to comply with such information may result in inadequate budgetary decisions, given the identified organizational problems, which may result in the disproportionate allocation of resources, given the determined objectives and goals. Insufficient resources imply failure to meet targets related to costs, productivity and performance. Likewise, they can increase levels of tension and insecurity in the work environment, negatively reflecting on individuals' levels of engagement and commitment to tasks, deadlines, objects, goals and expected results. Therefore, they need to be properly managed.

These findings provide important evidence that encourages the carrying out of new studies, since the research carried out has some limitations, which do not allow the generalization of these results. As this is cross-sectional research, there are reservations regarding the ability to generalize the results, as it focused



only on controllers from industrial organizations in Brazil and has a limited scope. Therefore, carrying out this study with other samples of these professionals and organizations, as well as on other units of analysis (other areas of organizational management and non-industrial organizations) may reveal other explanatory factors for the elements of analysis investigated in this research. In-depth case studies and experiments can also be carried out with the purpose of understanding such relationship, as well as testing the possible influence of these and other predictions of commitment to budgetary goals.

Exploring psychological effects such as attention, effort and persistence, related to the difficulty linked to the goal and the activities carried out, also constitutes an important study opportunity. Future research can also investigate possible dysfunctional behaviors (negative effects) linked to budgetary control in an environment of high organizational tension and job insecurity, such as the creation of budget slack, overestimation of costs and sales in the budget preparation process, or the feeding of problems resulting from conflicts of interest and information asymmetry.

The analysis of other factors involved in the effects of adopting budget management practices on commitment to budget goals can also be analyzed and reveal other predictors of the effects of control mechanisms on the organizational commitment of managers who have budgetary responsibility. The evidence produced in this research also includes findings from predominant sample of male professionals. This result, of prevalence of the male professional profile, is in line with the findings of previous studies, which denote historical factors of perceived inequality in the profession of controllers in Brazilian companies (Rengel et al., 2020). Therefore, the evaluation of such aspects together with other samples can also reveal particularities among their findings, which contributes to the advancement of new knowledge on the topic, inducing aspects related to gender, diversity, inclusion policies and organizational support structures (Baur & Avelino, 2021). Such aspects contribute opportunities for carrying out new studies.

## References

- Ali, M., Ali, I., Albort-Morant, G., & Leal-Rodríguez, A. L. (2020). How do job insecurity and perceived well-being affect expatriate employees' willingness to share or hide knowledge? *International Entrepreneurship and Management Journal*, 1-26. <https://doi.org/10.1007/s11365-020-00638-1>
- Baerdemaeker, J. D., & Bruggeman, W. (2015). The impact of participation in strategic planning on managers' creation of budgetary slack: The mediating role of autonomous motivation and affective organizational commitment. *Management Accounting Research*, 29(1), 1-12. <http://doi.org/10.1016/j.mar.2015.06.002>
- Baker, M. G. (2020). Nonrelocatable occupations at increased risk during pandemics: United States, 2018. *American Journal of Public Health*, 110(8), 1126-1132. <https://doi.org/10.2105/ajph.2020.305738>
- Baur, I. C., & Avelino, B. C. (2021). A Questão de Gênero em Relação à Profissão de *Controller*: Percepção de Estudantes e Docentes do Curso de Controladoria e Finanças da Universidade Federal de Minas Gerais. *Revista de Administração, Contabilidade e Economia da Fundace*, 12(3), 56-74. <http://dx.doi.org/10.13059/racef.v12i3.742>
- Bernd, D. C., Beuren, I. M., Pazetto, C. F., & Lavarda, C. E. F. (2022). Antecedents of Commitment to Budgetary Goals. *Revista de Administração Contemporânea*, 26(2), e200018. <https://doi.org/10.1590/1982-7849rac2022200018.en>
- Birnberg, J. G., Luft, J., & Shields, M. D. (2007). Psychology theory in management accounting research. *Handbook of Management Accounting Research*, 1, 113-135. [https://doi.org/10.1016/S1751-3243\(06\)01004-2](https://doi.org/10.1016/S1751-3243(06)01004-2)
- Bonache, A.B., Maurice, J. & Moris, K. (2012), Participation budgétaire et performance managériale: lien non significatif et contingences/budgetary participation and managerial performance: non significant link and contingencies, *Comptabilité Contrôle Audit*, 18(2), 125-184. <https://doi.org/10.3917/cca.182.0125>
- Brownell, P., & McInnes, M. (1986), Budgetary participation, motivation, and managerial performance, *Accounting Review*, 61(4), 587-600. <https://www.jstor.org/stable/247359>
- Cheng, M. T. (2012), The joint effect of budgetary participation and broad-scope management accounting systems on management performance, *Asian Review of Accounting*, 20(3), 184-197. <https://doi.org/10.1108/13217341211263256>
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology*, 85(1), 65-74. <https://doi.org/10.1037/0021-9010.85.1.65>
- Chong, V. K., & Chong, K. M. (2002). Budget goal commitment and informational effects of budget participation on performance: a structural equation modeling approach, *Behavioral Research in Accounting*, 14(1), 65-86. <https://doi.org/10.2308/bria.2002.14.1.65>
- Chong, V. K., & Johnson, D. M. (2007). Testing a model of the antecedents and consequences of budgetary participation on job performance, *Accounting and Business Research*, 37(1), 3-19. <https://doi.org/10.1080/00014788.2007.9730055>
- Covaleski, M., Evans III, J. H., Luft, J., & Shields, M. D. (2007). Budgeting research: Three theoretical perspectives and criteria for selective integration. *Handbook of Management Accounting Research*, 2, 587-624. [https://doi.org/10.1016/S1751-3243\(06\)02006-2](https://doi.org/10.1016/S1751-3243(06)02006-2)

- Dani, A. C., Zonatto, V. C. S., & Diehl, C. A. (2017). Participação orçamentária e desempenho gerencial: meta-análise das relações encontradas em pesquisas na área comportamental da contabilidade. *Advances in Scientific and Applied Accounting*, 10(1), 54-72. <http://dx.doi.org/10.14392/asaa.2017100104>
- De Cuyper, N., & Witte, H. (2011). The management paradox: Self-rated employability and organizational commitment and performance. *Personnel Review*, 40(2), 152–172. <https://doi.org/10.1108/00483481111106057>
- Derfuss, K. (2016). Reconsidering the participative budgeting– performance relation: A meta-analysis regarding the impact of level of analysis, sample selection, measurement, and industry influences. *The British Accounting Review*, 48(1), 17-37. <https://doi.org/10.1016/j.bar.2015.07.001>
- Dunk, A. S. (1989). Budget emphasis, budgetary participation and managerial performance: a note, *Accounting, Organizations and Society*, 14(4), 321-324. [https://doi.org/10.1016/0361-3682\(89\)90002-0](https://doi.org/10.1016/0361-3682(89)90002-0)
- Firth-Cozens, J. (1999). Clinical governance development needs in health service staff. *British Journal of Clinical Governance*, 7, 155-160. <https://doi.org/10.1108/14664109910315569>
- Ford, D., Myrden, S. E., & Jones, T. D. (2015). Understanding “disengagement from knowledge sharing”: Engagement theory versus adaptive cost theory. *Journal of Knowledge Management*, 19(3), 476-496. <https://doi.org/10.1108/JKM-11-2014-0469>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Frare, A. B., & Beuren, I. M. (2020). Efeitos da informação na insegurança e engajamento no trabalho em tempos de Pandemia. *Revista de Administração de Empresas*, 60(6), 400-412. <https://doi.org/10.1590/S0034-759020200604>
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65(1), 14–38. <https://doi.org/10.1016/j.jvb.2003.10.005>
- Gallie, D., Felstead, A., Green, F., & Inanc, H. (2017). The hidden face of job insecurity. *Work, Employment and Society*, 31(1), 36–53. <https://doi.org/10.1177/095001701562439>
- Goodell, J. W. (2020). Covid-19 and finance: Agendas for future research. *Finance Research Letters*, 35, 1-5. <https://doi.org/10.1016/j.frl.2020.101512>
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review*, 9(3), 438-448. <https://doi.org/10.5465/amr.1984.4279673>
- Greenhalgh, L., & Rosenblatt, Z. (2010). Evolution of research on job insecurity. *International Studies of Management and Organization*, 40(1), 6–19. <https://doi.org/10.2753/IMO0020-8825400101>
- Grodt, J. A. S., Zonatto, V. C. S., Degenhart, L., Piccinin, Y., & Bianchi, M. (2023). Effects of resilience and managerial attitudes on the relation between participative budgeting and managerial performance. *RAM. Revista de Administração Mackenzie (Online)*, 24, 1-27. <https://doi.org/10.1590/1678-6971/eRAMG230285.en>
- Guarnaccia, C., Scrima, F., Civilleri, A., & Salerno, L. (2018). The role of occupational self-efficacy in mediating the effect of job insecurity on work engagement, satisfaction and general health. *Current Psychology*, 37(3), 488-497. <https://doi.org/10.1007/s12144-016-9525-0>
- Hair, Jr., J. F., Risher, J. J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hall, M. (2008). The effect of comprehensive performance measurement systems on role clarity, psychological empowerment and managerial performance. *Accounting, Organizations and Society*, 33(2-3), 141-163. <https://doi.org/10.1016/j.aos.2007.02.004>
- Hamouche, S. (2020). Covid-19 and employees’ mental health: Stressors, moderators and agenda for organizational actions. *Emerald Open Research*, 2(15), 1-13. <https://doi.org/10.35241/emeraldopenres.13550.1>
- Healy, C., McKay, M. (2000). Nursing Stress: The effects of coping strategies and job satisfaction in a sample of Australian nurses. *Journal of Advanced Nursing*, 31, 681-688. <https://doi.org/10.1046/j.1365-2648.2000.01323.x>
- Hughes, C., Ensor, R., Wilson, A., & Graham, A. (2009). Tracking executive function across the transition to school: A latent variable approach. *Developmental neuropsychology*, 35(1), 20-36. <https://doi.org/10.1080/87565640903325691>
- Jermias, J., & Yigit, F. (2012). Budgetary participation in turkey: the effects of information asymmetry, goal commitment, and role ambiguity on job satisfaction and performance. *Journal of International Accounting Research*, 12(1), 29-54. <https://doi.org/10.2308/jiar-50385>
- Jiang, L., Probst, T. M. (2019). The moderating effect of trust in management on consequences of job insecurity. *Economic and Industrial Democracy*, 40(2), 409–433. <https://doi.org/10.1177/0143831X16652945>
- Karatepe, O. M., Rezapouraghdam, H., & Hassannia, R. (2020). Job insecurity, work engagement and their effects on hotel employees’ non-green and nonattendance behaviors. *International Journal of Hospitality Management*, 87, 102472. <https://doi.org/10.1016/j.ijhm.2020.102472>

- Kausto, J., Elo, A.-L., Lipponen, J., & Elovainio, M. (2005). Moderating effects of job insecurity in the relationships between procedural justice and employee well-being: Gender differences. *European Journal of Work and Organizational Psychology*, 14(4), 431–452. <https://doi.org/10.1080/13594320500349813>
- Khosravi P., Rezvani A., & Ashkanasy, N. M. (2020). Emotional intelligence: A preventive strategy to manage destructive influence of conflict in large scale projects. *International Journal Project Management*, 38(1), 36-46. <https://doi.org/10.1016/j.ijproman.2019.11.001>
- Kren, L. (1992). Budgetary participation and managerial performance: the impact of information and environmental volatility. *Accounting Review*, 61(3), 511-526. <https://www.jstor.org/stable/i302540>
- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Reyes, C. A. M., Prochotta, A., Berger, E. S. (2020). Startups in times of crisis: A rapid response to the Covid-19 pandemic. *Journal of Business Venturing Insights*, 13(e00169), 1-13. <https://doi.org/10.1016/j.jbvi.2020.e00169>
- Kyj, L., & Parker, R. J. (2008). Antecedents of budget participation: Leadership style, information asymmetry, and evaluative use of budget. *Abacus*, 44(4), 423-442. <https://doi.org/10.1111/j.1467-6281.2008.00270.x>
- Lavarda, C. E. F., & Almeida, D. M. (2013). Participação orçamentária e assimetria informacional: um estudo em uma empresa multinacional. *Brazilian Business Review*, 10(2), 74-96. <http://dx.doi.org/10.15728/bbr.2013.10.2.4>
- Leach-López, M. A., Stammerjohan, W. W., & McNair, F. M. (2007). Differences in the role of job-relevant information in the budget participation-performance relationship among us and Mexican managers: a question of culture or communication. *Journal of Management Accounting Research*, 19(1), 105-136. <https://doi.org/10.2308/jmar.2007.19.1.105>
- Leach-López, M. A., Stammerjohan, W. W., & Sang Lee, K. (2009). Budget participation and job performance of South Korean managers mediated by job satisfaction and job relevant information. *Management Research News*, 32(3), 220-238. <https://doi.org/10.1108/01409170910943093>
- Lee, C., Huang, G. H., & Ashford, S. J. (2018). Job insecurity and the changing workplace: recent developments and the future trends in job insecurity research. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(November 2017), 335–359. <https://doi.org/10.1146/annurev-orgpsych-032117-104651>
- Locke, E. A., Latham, G. P., & Erez, M. (1988). The determinants of goal commitment. *Academy of Management Review*, 13(1), 23-39. <https://doi.org/10.5465/amr.1988.4306771>
- Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, 15(5), 265-268. <https://doi.org/10.1111/j.1467-8721.2006.00449.x>
- Llosa, J. A., Agulló Tomás, E., Menendez Espina, S., Rodríguez Suarez, J., & Boada Grau, J. (2020). Incertidumbre laboral, salud mental y apoyo social en trabajadores pobres. *Athenea Digital*, 20(1), 1–24. <https://doi.org/10.5565/rev/athenea.2178>
- Lunardi, M. A., Zonatto, V. C. da S., & Nascimento, J. C. (2020). Mediating cognitive effects of information sharing on the relationship between budgetary participation and managerial performance. *Revista Contabilidade & Finanças*, 31(82), 14-32. <https://doi.org/10.1590/1808-057x201908610>
- Ma, B., Liu, S., Lassleben, H., & Ma, G. (2019). The relationships between job insecurity, psychological contract breach and counterproductive workplace behavior: Does employment status matter? *Personnel Review*, 48(2), 595–610. <https://doi.org/10.1108/PR-04-2018-0138>
- Machado, F. S., Zonatto, V. C. da S., Degenhart, L., Kieling, D. L., & Bianchi, M. (2022). Enabling cognitive effects of vertical information sharing on psychological capital, managerial attitudes, and performance. *Brazilian Administration Review*, 19(3), 1-27. <https://doi.org/10.1590/1807-7692bar2022210085>
- Macinati, M. S., Bozzi, S., & Rizzo, M. G. (2016). Budgetary participation and performance: The mediating effects of medical managers' job engagement and self-efficacy. *Health Policy*, 120(9), 1017-1028. <https://doi.org/10.1016/j.healthpol.2016.08.005>
- Mackie, K. S., Holahan, C. K., & Gottlieb, N. H. (2001). Employee involvement management practices, work stress, and depression in employees of a human services residential care facility. *Human Relations*, 54(8), 1065-1092. <https://doi.org/10.1177/0018726701548004>
- Magner, N., Welker, R. B., & Campbell, T. L. (1995). The interactive effect of budgetary participation and budget favorability on attitudes toward budgetary decision makers: A research note. *Accounting, Organizations and Society*, 20(7-8), 611-618. [https://doi.org/10.1016/0361-3682\(95\)00006-U](https://doi.org/10.1016/0361-3682(95)00006-U)
- Magner, N., Welker, R. B., & Campbell, T. L. (1996). Testing a model of cognitive budgetary participation processes in a latent variable structural equations framework. *Accounting and Business Research*, 27(1), 41-50. <https://doi.org/10.1080/00014788.1996.9729530>
- Milani, K. W. (1975). The relationship of participation in budget setting to industrial supervisor performance and attitudes: A field study. *The Accounting Review*, 50(2), 274-284. <https://www.jstor.org/stable/244709>
- Mishra, K., Boynton, L., & Mishra, A. (2014). Driving employee engagement: The expanded role of internal communications. *Journal of Business Communication*, 51(2), 183-202. <https://doi.org/10.1177/2329488414525399>
- Mosadeghrad, A., Ferlie, e., & Rosenberg, D. (2011). A study of relationship between job stress, quality of working life and turnover intention among hospital employees. *Health Services Management Research*, 24(4), 170-81. <https://doi.org/10.1258/hsmr.2011.011009>



- Murray, D. (1990). The performance effects of participative budgeting: An integration of intervening and moderating variables. *Behavioral Research in Accounting*, 2(2), 104-123.
- Nouri, H., & Parker, R. J. (1998). The relationship between budget participation and job performance: the roles of budget adequacy and organizational commitment. *Accounting, Organizations and Society*, 23(5), 467-483. [https://doi.org/10.1016/S0361-3682\(97\)00036-6](https://doi.org/10.1016/S0361-3682(97)00036-6)
- Oginska-Bulik, N. (2006). Occupational Stress and its Consequences in Healthcare Professionals: The Role of Type D Personality. *International Journal of Occupational Medicine and Environmental Health*, 19(2), 113-122. <https://doi.org/10.2478/v10001-006-0016-7>
- Palomino, M. N., & Frezatti, F. (2016). Conflito de papel, ambiguidade de função e satisfação no trabalho: Percepções dos controladores brasileiros. *Revista de Administração*, 51(2), 165-181. <https://doi.org/10.5700/rausp1232>
- Parker, R. J., & Kyj, L. (2006). Vertical information sharing in the budgeting process. *Accounting, Organizations and Society*, 31(1), 27-45. <https://doi.org/10.1016/j.aos.2004.07.005>
- Paschoal, T., & Tamayo, Á. (2004). Validação da escala de estresse no trabalho. *Estudos de Psicologia*, 9(1), 45-52. <https://doi.org/10.1590/S1413-294X2004000100006>
- Pereira, A., Medeiros, A., Lopes, P., Ataíde, R., Pinto, C., Motta, E., & Bernardino, O. (2003). University student stress inventory: An exploratory study. *Proceedings of the International Conference of the Stress and Anxiety, Book of Abstracts*, Lisboa, Portugal, 24.
- Piccinin, Y., Zonatto, V. C. da S., Degenhart, L., Grodt, J. A. S., & Bianchi, M. (2022). Efeitos das Crenças de Autoeficácia e Atitudes Gerenciais na relação entre Participação Orçamentária e Desempenho. *Revista de Educação e Pesquisa em Contabilidade (REPeC)*, 16(2), 55-75. <https://dx.doi.org/10.17524/repec.v16i2.2999>
- Pinna, R., De Simone, S., Cicotto, G., & Malik, A. (2020). Beyond organizational support: Exploring the supportive role of co-workers and supervisors in a multi-actor service ecosystem. *Journal of Business Research*, 121, 524-534. <https://doi.org/10.1016/j.jbusres.2020.02.022>
- Prabhakaran, A. K., & Rajandran, K. V. R. (2019). Work environment and stress of bank employees. *International Journal of Recent Technology and Engineering*, 8(2), 716-718. <https://doi.org/10.3389/fpsyg.2017.02166>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Quirin, J. J., Donnelly, D. P., & Bryan, D. O. (2000). Consequences of participative budgeting: the roles of budget-based compensation, organizational commitment, and managerial performance, in Epstein, M. J., & Lee, J. Y. (Eds). *Advances in Management Accounting*, 9, Emerald Group Publishing, 127-144.
- Rengel, R., Monteiro, J. J., Lunkes, R. J., Lavarda, C. E. F., & Schnorrenberger, D. (2020). Efeito das características dos gestores na participação orçamentária mediado pela percepção de justiça processual. *Contabilidade Gestão e Governança*, 23(2), 256-275. [https://doi.org/10.51341/1984-3925\\_2020v23n2a7](https://doi.org/10.51341/1984-3925_2020v23n2a7)
- Rhodes, S. R., & Steers, R. M. (1981). Conventional vs. Worker-owned organizations. *Human Relations*, 34(12), 1013-1035. <https://doi.org/10.1177/001872678103401201>
- Ribeiro, A. D. A., Pereira, J. R., & Caneppele, N. R. (2024). Estresse ocupacional no setor bancário: implicações na saúde do trabalhador e na funcionalidade da organização. *Cadernos EBAPE. BR*, 22(2), e2023-0103. <https://doi.org/10.1590/1679-395120230103>
- Richter, A., & Näswall, K. (2019). Job insecurity and trust: Uncovering a mechanism linking job insecurity to well-being. *Work & Stress*, 33(1), 22-40. <https://doi.org/10.1080/02678373.2018.1461709>
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619. <https://doi.org/10.1108/02683940610690169>
- Schlup, D. et al. (2021). Mediating effects of psychological capital and burnout syndrome on the relationship between budgetary participation and management performance. *Advances in Scientific and Applied Accounting*, 14(1), 297-314/315. <https://doi.org/10.14392/asaa.2021140109>
- Schmitz, N., Neumann, W., & Oppermann, R. (2000). Stress, burnout and locus of control in German nurses. *International Journal of Nursing Studies*, 37(2), 95-99. [https://doi.org/10.1016/S0020-7489\(99\)00069-3](https://doi.org/10.1016/S0020-7489(99)00069-3)
- Selye, H. (1956). The stress of life. New York: McGraw-Hill Book Co.
- Shields, M. D., Deng, F. J., & Kato, Y. (2000). The design and effects of control systems: tests of direct-and indirect-effects models. *Accounting, Organizations and Society*, 25(2), 185-202. [https://doi.org/10.1016/S0361-3682\(99\)00041-0](https://doi.org/10.1016/S0361-3682(99)00041-0)
- Shields, J. F., & Shields, M. D. (1998). Antecedents of participative budgeting. *Accounting, Organizations and Society*, 23(1), 49-76. [https://doi.org/10.1016/S0361-3682\(97\)00014-7](https://doi.org/10.1016/S0361-3682(97)00014-7)
- Shoss, M. K. (2017). Job insecurity: An integrative review and agenda for future research. *Journal of Management*, 43(6), 1911-1939. <https://doi.org/10.1177/01492063176915>
- Silva, P., Mota, J., & Moreira, A. C. (2022). Budget participation and employee performance in real estate companies: the mediating role of budget goal commitment, trust and job satisfaction. *Baltic Journal of Management*. <https://www.emerald.com/insight/1746-5265.htm>



- Stander, M. W., & Rothmann, S. (2010). Psychological empowerment, job insecurity and employee engagement. *SA Journal of Industrial Psychology*, 36(1), 1-8. <https://doi.org/10.4102/sajip.v36i1.849>
- Sora, B., Höge, T., Caballer, A., & Peiró, J.M. (2018). Employment contract, job insecurity and employees' affective well-being: The role of self-and collective efficacy. *Economic and Industrial Democracy*, 40(2). <https://doi.org/10.1177/0143831X18804>
- Ursin, H., & Eriksen, H. R. (2004). The cognitive activation theory of stress. *Psychoneuroendocrinology*, 29(5), 567-592. [https://doi.org/10.1016/S0306-4530\(03\)00091-X](https://doi.org/10.1016/S0306-4530(03)00091-X)
- Venkatesh, R., & Blaskovich, J. (2012). The mediating effect of psychological capital on the budget participation-job performance relationship. *Journal of Management Accounting Research*, 24(1), 159-175. <https://doi.org/10.2308/jmar-50202>
- Wafiroh, N. L., Abdani, F., & Nurdin, F. (2020). Budget participation and budgetary slack: The mediating effect of autonomous budget motivation. *Journal Akuntansi*, 10(3), 287-300. <https://doi.org/10.33369/j.akuntansi.10.3.287-300>
- Wang, J. L., & Patten, S. B. (2001). Perceived work stress and major depression in the Canadian employed population, 20-49 years old. *Journal of Occupational Health Psychology*, 6, 283-289. <https://doi.org/10.1037/1076-8998.6.4.283>
- Wang, W., Mather, K., & Seifert, R. (2018). Job insecurity, employee anxiety, and commitment: The moderating role of collective trust in management. *Journal of Trust Research*, 8, 1-18. <https://doi.org/10.1080/21515581.2018.1463229>
- Weiskirchner-Merten, K. (2020). Interdependence, participation, and coordination in the budgeting process. *Business Research*, 13, 247-274. <https://doi.org/10.1007/s40685-019-0090-x>
- Welsh, D. T., Baer, M. D., Sessions, H., & Garud, N. (2020). Motivated to disengage: The ethical consequences of goal commitment and moral disengagement in goal setting. *Journal of Organizational Behavior*, 41(7), 663-677. <https://doi.org/10.1002/job.2467>
- Witte, H. (2000). Arbeidsethos en jobonzekerheid: Meting en gevolgen voor welzijn, tevredenheid en inzet op het werk. In: R. Bouwen, K. Witte, H. Witte, & T. Taillieu (Eds.), *Van groep naar gemeenschap* (325-350). Leuven, Belgium: Garant.
- Zonatto, V. C. da S., & Lavarda, C E. F. (2013). Evidências dos efeitos da participação orçamentária na assimetria de informação, estresse ocupacional e desempenho no trabalho. *Advances in Scientific and Applied Accounting*, 6(1), 92-111. <https://doi.org/10.14392/ASAA/2013060105>
- Zonatto, V. C. da S., Weber, A., & Nascimento, J. C. (2019). Efeitos da Participação Orçamentária na Assimetria Informacional, Estresse Ocupacional e Desempenho Gerencial. *Revista de Administração Contemporânea*, 23(1), 67-91. <https://doi.org/10.1590/1982-7849rac2019170327>
- Zonatto, V. C. da S., Nascimento, J. C., Lunardi, M. A., & Degenhart, L. (2020). Efeitos da participação orçamentária nas atitudes, satisfação e desempenho gerencial. *Revista de Administração Contemporânea*, 24(6), 532-549. <https://doi.org/10.1590/1982-7849rac2020200047>
- Zonatto, V. C., Jacomossi, F. A., Schlup, D., & Machado, F. S. (2022). Efeitos da favorabilidade orçamentária na relação entre participação, atitudes e desempenho gerencial. *Revista Contemporânea de Contabilidade*, 19(50), 161-178. <https://doi.org/10.5007/2175-8069.2022.e82385>

\* A preprint version of the paper was presented at the 13th UFSC Congress of Controllership and Finance, 2023

## NOTES

### ACKNOWLEDGMENT

To the National Council for Scientific and Technological Development (CNPq). The Research Support Foundation of the State of Rio Grande do Sul (FAPERGS).

### AUTHORSHIP CONTRIBUTION

Conception and preparation of the manuscript: M. N. Santos, V. C. S. Zonatto

Data collection: M. N. Santos, V. C. S. Zonatto

Data analysis: M. N. Santos, V. C. S. Zonatto, L. Degenhart

Discussion of the results: M. N. Santos, V. C. S. Zonatto, L. Degenhart, M. Trevisan

Revisão e aprovação: M. N. Santos, V. C. S. Zonatto, L. Degenhart, M. Trevisan

### DATASET

The dataset supporting the results of this study is not publicly available.

### FINANCING

National Council for Scientific and Technological Development (CNPq). Research Support Foundation of the State of Rio Grande do Sul (FAPERGS).

## **CONSENT TO USE IMAGE**

Does not apply.

## **APPROVAL OF THE RESEARCH ETHICS COMMITTEE**

Report No. 5,101,241. CAAE: 52940021.1.0000.5346

## **CONFLICT OF INTERESTS**

Does not apply.

## **USE LICENSE**

Copyrights for articles published in this journal are the author's, with first publication rights for the journal. Due to appearing in this Public Access Journal, the articles are free to use, with their own attributions, in educational, professional and public management applications. The journal adopted the [Creative Commons Attribution 4.0 International license - CC BY NC ND](#). This license allows accessing, downloading, copying, printing, sharing, reusing and distributing the articles provided that the source is acknowledged, attributing the due authorship credits. In such cases, no permission is required from the authors or editors. Authors are authorized to assume additional contracts separately, for non-exclusive distribution of the version of the work published in this journal (eg, publishing in institutional repository or a book chapter).

## **PUBLISHER**

Federal University of Santa Catarina. Accounting Sciences Course and Postgraduate Program in Accounting. Publication on the [UFSC Journal Portal](#). The ideas expressed in this article are the responsibility of their authors, and do not necessarily represent the opinion of the editors or the university.

## **EDITORS**

José Alonso Borba, Denize Demarche Minatti Ferreira, Carlos Eduardo Facin Lavarda.

## **HISTORIC**

Received on: 26/01/2024 - Peer reviewed on: 18/07/2024 - Reformulated on: 31/08/2024 - Recommended for publication on: 17/10/2024 - Published on: 10/12/2024