Effect of Manager’s Characteristics on Budget Participation mediated by Perception of Procedural Justice

ABSTRACT
Objective: To examine the relationship between managerial characteristics, perception of procedural fairness and budget participation.
Method: A survey was conducted with 94 managers of large hotels in Brazil. We adopted the technique of Structural Equation Modeling for data analysis, performed in the software SmartPLS version 3.
Originality/Relevance: The proposal indicates that decisions taken during the budget process are related to managers’ characteristics. These characteristics influence budget participation and the perception of procedural justice. The relevance of the research is to check the mediation of procedural justice in the relationship between managers’ characteristics and budget participation.
Results: The results indicate that managers’ characteristics are directly related to budget participation, and managers' perception of procedural justice is related to budget participation. Also, it has a mediating relationship between managers’ characteristics and budget participation. Based on the findings, it appears that the characteristics of Brazilian hotel managers determine the way managers feel procedurally justified and improve their budget participation.
Theoretical/Methodological contributions: This paper makes a relevant contribution to the literature on the study theme, as there is still little knowledge of how procedural justice can mediate this relationship between managerial characteristics and budget participation.
Social/management contributions: The present research contributes to hotel management because it is a sector characterized by a high level of competition and risk, in which budget efficiency can be one of the key success factors.
Keywords: Upper Echelon Theory (UET); Characteristics of TMT; Budget Participation; Procedural justice; Hotels.

How to Cite (APA)
1 INTRODUCTION

Budgets remain as one of the most used instruments by companies (Abdel-Kader & Luther, 2006; Libby & Lindsay, 2010; Ostergren & Stensaker, 2011; Sivabalans, Booth, Malmi, & Brown, 2009; Uyar, 2009), including hotels (Castro, Santos, Souza, & Lunkes, 2012; Codesso, Lunkes & Suave, 2013; Uyar & Bilgin, 2011). It is important for management and can be fundamental for the competitiveness and survival of enterprises. Participation in the budget process is essential both in the preparation as well as in the execution and control phases, in order for an organization to achieve the results expected. Budget participation is the process of involving employees and their supervisors in the preparation, execution, and control of the budget (Covaleski, Evans, Luft, & Shields, 2007; Lunardi, Degenhart, & Zonatto, 2019; Shields, Deng & Kato, 2000; Shields & Shields, 1998). It increases commitment to budget goals and, consequently, improves organizational performance (Wentzel, 2002).

Top managers play an important role in budget participation. They are formed by the CEO and other members of the Top Management Team (TMT) (e.g. general directors and department heads), who are familiar with the company’s management (Bedford, Bisbe & Sweeney, 2019). Studies drawing on the Upper Echelon Theory (UET) show that managers’ characteristics are associated with making different decisions which, in turn, are related to a company's performance (Wang, Holmes Jr., Oh, & Zhua, 2016). In other words, the experiences, values, and personalities of top managers affect their choices (Hambrick, 2007) and, as a result of these choices, organizational performance alike (Carpenter, Geletkanycz & Sanders, 2004; Hambrick & Mason, 1984). These characteristics of managers (e.g., age, gender, education, time in office and duality), can influence the level of budget participation.

However, the literature presents different studies that show the influence of managers’ characteristics on decision-making (Bortoluzzi, Zakaria, Santos, & Lunkes, 2016; Lunkes, Pereira, Santos, & Rosa, 2019; Menegazzo, Lunkes, Mendes, & Schorronberger, 2017; Wang et al., 2016). Particularly, there is a gap in specific studies in terms of budget participation, especially in hotel organizations. This study broadens knowledge of UET-based decision-making by including the budget participation process, that is, by showing that managerial characteristics can also account for (proxy) the involvement of managers in the budget.

In addition, there is still little knowledge of how procedural justice can mediate this relationship between managers’ characteristics and budget participation. Procedural justice can be understood as the subordinates’ perception of the evaluation made by their superiors (McFarlin & Sweeney, 1992). Wentzel (2002) indicates that high budget participation develops a sense of justice in the individual, as well as increases his commitment to budgetary goals and, consequently, improves organizational performance. Previous studies have shown that there is a relationship between procedural justice and budget participation (e.g., Lau & Lim, 2007; Lau & Tan, 2006; Lindquist, 1995). However, it is understood that managers’ characteristics can influence budget participation and that the perception of belonging (Lau & Tan, 2006) and participation in strategic decisions (Mazzioni, Politelo & Lavarda, 2015; Muhammad, 2004) may have a positive impact on this relationship, since procedural justice is related to the means used to achieve the ends, that is, how decisions are made (Tang & Sarsfield-Baldwin, 1996).

In a nutshell, knowledge of the relationship between managers’ characteristics and procedural justice in budget participation is inconclusive. Therefore, further studies are needed to provide further insights into the impact of features and procedural justice on decisions and actions in the budget process. To try to better understand these reasons, the
objective of the research is to examine the relationship between managers’ characteristics, perception of procedural justice and budget participation. To conduct the study, a questionnaire was applied to collect data from 94 hotels in Brazil.

This study contributes in several ways. First, from a theoretical point of view, knowledge is added to the literature, since the observable characteristics of managers influence budget participation and procedural fairness. This finding provides further insights to the studies of Paz (1992); Andrade, Fischer, and Stefano (2013); thus, when relating the observable characteristics with the perception of justice, they leave aside procedural justice. Therefore, it shows that the perception of procedural justice can be fundamental and contributes to this relationship. The research also advances in knowledge about justice, especially procedural justice. Moreover, the study contributes to the hotel sector justified by the instability of the sector, which is characterized by a high level of competition and risk (Gomez-Conde, Lunke & Rosa, 2019; Lunke, Bortoluzzi, Anzilago, & Rosa, 2019), where budget efficiency can be one of the main success factors. Under these conditions, it is important to observe how managers’ characteristics and justice affect participation in the budget.

2 LITERATURE REVIEW

2.1 Upper Echelon Theory

Introduced by Hambrick and Mason (1984), the Upper Echelon Theory (UET) takes into account the processing of behavioral information, based on two interconnected ideas: (i) executives act on the basis of their personalized interpretations of the strategic situations they face; and (ii) these interpretations occur according to executives' experiences, values, and personalities (Bortoluzzi et al., 2016; Hambrick & Mason, 1984). Consequently, the organization is a reflection of its managers (Carpenter, Geletkanycz & Sanders, 2004).

Figure 1. Theory of Higher Levels

Support to the UET is based on the concept of limited rationality (Cyert & March, 1963), in which decisions are satisfactory, but not optimal. There is a limitation in the human
being in having access and cognitively processing all available information. Therefore, the optimization of decisions is considered as fiction, in which affective, cultural pressures and power games influence choices (Bortoluzzi et al., 2016; Cyert & March, 1963). Figure 1 shows the model of the UET, of how the characteristics are linked to choices and performance.

According to the model shown in Figure 1, managers’ characteristics (whether observable or psychological) influence their strategic choices, which impact the future of the business (Carpenter, Geletkanycz & Sanders, 2004). Thus, the characteristics of high and medium-level managers need to be identified.

The literature shows that managers’ demographic characteristics are closely related to their decision-making, especially age (Brooks, Sangiorgi, Hillenbrand, & Money, 2018; Dohmen, Falk, Huffman, Sunde, Schupp, & Wagner, 2011; Geetha & Selvakumar, 2016; Hallahan, Faff, & Mckenzie, 2004; Ramiah, Zhao, Moosa, & Graham, 2016; Ross, Nora, & Milani, 2015), o gênero (Brooks et al., 2018; Coet & Mcdermott; 1979; Dohmen et al., 2011; Francis, Hasan, Park, & Wu, 2015; Geetha & Selvakumar, 2016; Grable, 2000; Maxfield, Shapiro, Gupta, & Hass, 2010; Meier-Pesti & Goetze, 2005; Montinari & Rancan, 2013; Ramiah et al., 2016; Yao, Sharpe, & Wang, 2011); educational level (Geetha & Selvakumar, 2016; Grable & Joo, 2004; Hallahan, Faff & Mckenzie, 2004; Sung & Hanna, 1996); and experience (Shepherd, Williams & Patzelt, 2015), for example. The relationships between demographic characteristics and budget participation are presented in the next section.

2.2 Characteristics of TMT and budget participation

The UET presents evidence of the influence of managers’ characteristics on the organization's strategic choices, shaped by its interpretations and psychological constructions of the environment (Carpenter, Geletkanycz & Sanders, 2004). This research considers that the observable characteristics of top executives (Top Management Team - TMT), such as age, gender, experience, duality, level of education, position, and field of training, are related to budget participation, as they can lead to differences in involvement and commitment to the budget and in organizational performance. In this way, knowledge of factors that explain budget participation is expanded (Covaleski et al., 2007; Lunardi, Degenhart, & Zonatto, 2019; Shields, Deng & Kato, 2000; Shields & Shields, 1998; Wentzel, 2002).

The literature dealing with age is extensive and presents differences in decision-making. It appears that younger executives are more prone to taking risks in the search for high returns. On the other hand, older managers tend to be more cautious and conservative (Bantel & Jackson, 1989; Brooks et al., 2018; Dohmen et al., 2011; Hallahan, Faff, & McKenzie, 2004; Hambrick & Mason, 1984; Naranjo-Gil, Maas, & Hartmann, 2009; Pavlotos, 2012; Wiersema & Bantel, 1992; Yao, Sharpe, & Wang, 2011). The balance between risk and return are elements present in the discussions on budget goals, which are aligned in a participatory environment.

Experience follows the same direction, in the search for immediacy by less experienced managers in contrast with long-term vision for the most experienced (Peni, 2014; Yang, Zimmerman, & Jiang, 2011). When dealing with accounting information, Mendes, Lunkes, Menegazzo, Schnorrenberger and Lavarda (2019) stressed that, the more experienced a manager is, the less he uses accounting instruments. Another aspect pointed out by the literature is that experience has a negative relationship with strategic planning activities (Gibbons & O’Connor, 2005). As for performance in budgetary activities, previous studies point to the positive relationship with managers’ experience, resulting from time of working.
in the current position (Leach-López, Stammerjohan & Mcnair, 2008; Libby & Luft, 1993; Zonatto, 2014).

Previous research also points out that managers with less work experience tend to have less legitimacy in their decisions (Miller, 1993), while managers with more work experience are able to manage risks better and maintain a certain attitude that allows them to receive less pressure from other members of the company and remain stable (Barker & Mueller, 2002; Henderson, Miller & Hambrick, 2006), a fact that allows them to make more assertive and less risky decisions (Kor, 2006; Mcclelland, Barker, & Oh, 2012). Another interpretation is that higher-level managers are more likely to participate in the budget. (Goddard, 1997). As a result, they tend to be more cautious and contribute to a better budgeting process (Libby & Lindsay, 2010). It should be noted that managers, who also preside over the board of directors (duality) and, thus, have a higher level of responsibility, are more cautious in decisions and can be more assertive in decisions involving the budget.

As far as gender is concerned, women are less tolerant of risk when compared to men (Coet & McDermott; 1979; Dohmen et al., 2011; Geetha & Selvakumar, 2016; Grable, 2000; Montinari & Rancan, 2013; Sarin & Wieland, 2016). However, there is research that states otherwise; for example, Johnson and Powell (1994) pointed out that men and women display similar risk propensity attitudes and make decisions of equal quality when they are managers. Their finding is corroborated by the study of Lavarda and Fank (2014), which reported that gender does not influence participation and budget slack.

Level of education is also highlighted in the UET as an important characteristic. The higher the level of education, the larger the increase in capacity, flexibility, and receptiveness to innovation (Li & Tan, 2009), which are factors that may have a positive relationship with the use of accounting instruments and other information systems (Child, 1997; Hambrick & Mason 1984; Mendes et al., 2019; Menegazzo et al., 2017; Naranjo-Gil & Hartmann, 2007).

As for the field of training, Lima Filho, Bruni and Sampaio (2012) tried to test whether budget-related decisions are different between accountants and administrators. The authors point out that the sciences that seek to train professionals in the field of management provide relatively homogeneous training, which is why there is no difference among decisions. Based on this evidence, it can be assumed that in the hotel sector, training areas such as administration, accounting, hospitality, and tourism, tend to have a more homogeneous formative character.

Finally, Zor, Linder, and Endenich (2018) show that demographic characteristics (age, education, and experience) are related to budgetary practices. The first hypothesis of this research, which highlights budget participation, is based on the empirical evidence presented on the relationship between the observable characteristics of senior executives and various aspects of the budget process:

H1 - There is a direct and positive relationship between managers’ characteristics and budget participation.

2.3 Procedural justice and budget participation

The literature presents two forms of organizational justice: distributive justice and procedural justice. Tang and Sarsfield-Baldwin (1996) distinguish them as follows: distributive justice deals with the ends achieved (what decisions are) while procedural justice relates to the means used to achieve these ends (how decisions are made). Superiors are likely to be aware that their subordinates care about procedural justice in their workplace (Tyler, 1989).
Procedural justice is understood by McFarlin and Sweeny (1992) as subordinates perceive their superiors evaluate about themselves. Management accounting studies (for example, Lau & Tan, 2006; Lindquist, 1995; Wentzel, 2002) have turned to procedural justice and understand that it is important to elucidate the relationships between accounting and individuals.

Procedural justice, in the research by Lau and Tan (2006), showed a positive relationship with budget participation. The authors understand that individuals’ perception of organizational belonging makes them feel more justified and, therefore, more participative in group decisions.

Consequently, this participation in strategic decisions makes individuals have a higher perception of procedural justice (Mazzion, Politelo & Lavarda, 2015; Muhammad, 2004). The findings of Wentzel (2002) indicate that a high budget participation develops a sense of justice in the individual, as well as increases his commitment to the budgetary goals and, thus, improves organizational performance.

Lau and Lim (2007) reinforce these results by stating that there is an indirect effect of the perception of justice on performance, that is, there is a mediation link between these variables and budget participation. Lindquist (1995) suggested that the perception of justice has an antecedent role of budget participation, beside sheds light on how fundamental the analysis of their relationship is for a better understanding of the budget process. Then, the second research hypothesis is formulated as follows:

H2 - There is a direct and positive relationship between procedural justice and budget participation.

2.4 Characteristics of TMT, procedural justice and budget participation

As presented in the previous sections, a great deal of research has linked demographic characteristics to decision-making and budget participation, as well as identified a relationship between the perception of justice and participatory budgeting. As for the relationship between demographic variables and the perception of justice, the literature is fragmented, and the studies have included distributive justice in particular, that is, they have focused on the ends.

Even so, such findings are relevant to the point of showing that the gender variable does not influence the perception of distributive justice (Andrade, Fischer, & Stefano, 2013; Paz, 1992). However, there is a positive relationship between age and time in the company with distributive justice (Andrade, Fischer & Stefano, 2013; Paz, 1992). On the other hand, level of education negatively influences the perception of distributive justice (Andrade, Fischer & Stefano, 2013).

Ribeiro and Bastos (2010) investigated demographic characteristics as antecedents of distributive justice, which, in turn, resulted in organizational commitment. They found that age and marital status increase the relationship, while education has an inverse relationship. Nahartyo (2013) suggests that future research should investigate the relationship between budget participation and procedural justice with the addition of the effects of demographic variables. Given the above, the last hypothesis of this study is formulated:

H3 - There is a positive relationship between managers’ characteristics and budget participation mediated by procedural justice.

Based on the hypotheses presented above, the theoretical model of the study is presented below (Figure 2).
Figure 2. Research design

After presenting the bases of the UET, Procedural justice and Budget Participation, the next section will describe with methodological procedures.

3 METHODOLOGICAL PROCEDURES

This research has a quantitative approach, and is characterized as a descriptive study. It uses primary sources to achieve the objective of examining the relationship between managers’ characteristics and budget participation mediated by procedural justice. As for the procedures, the study is characterized as a survey.

The research population consisted of high and medium-level professionals from hotel companies, because this sector is economically important in terms of generation of jobs and income. The research population covered 889 hotels and 1,585 inns on the Brazilian coast listed on Booking, on December 13, 2018, in a total of 2,474 companies in the accommodation industry.

To send the survey instrument, Linkedin was used to contact the population of middle and top managers of the selected companies. The prospective informants were validated as high and medium-level professionals if they had one of the following positions in their Linkedin profile: Chief Executive Officer (CEO), Chief Financial Officer (CFO), Controller, Director, Manager or Supervisor. The questionnaire was made available through the Google Docs platform, available during the period from December 3, 2018, to April 1, 2019. A total of 100 responses were received; however, 6 of them had to be excluded from the sample, as they did not answer all the due questions, or because the respondents did not work in the hospitality industry. Therefore, the final sample had a total of 94 participants.

The research instrument was based on instruments previously validated in the literature, and structured into 2 constructs (Procedural justice and Budget participation), with 10 assertions measured on a 7-point Likert scale. These constructs were back-translated (translation and back-translation). To compose the construct Managers’ characteristics, the instrument contained questions about the demographic characteristics of the individuals. Importantly, a pre-test was carried out with two master’s students and two doctoral professors with previous professional and academic experience in accounting (Gomez-Conde, Lunkes & Rosa, 2019). They provided feedback as to whether or not they had understood each statement. The research constructs are shown in Table 1.
Effect of Manager’s Characteristics on Budget Participation mediated by Perception of Procedural Justice

Table 1
Research constructs, variables and references

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Variables</th>
<th>References</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers’ Characteristics</td>
<td>Age; Gender; Experience; Duality; Degree of Formation; Office; Training Area.</td>
<td>Carpenter, Geletkanycz &amp; Sanders (2004); Libby e Lindsay (2010); Libby e Luft (1993); Lima Filho, Bruni e Sampaio (2012)</td>
<td>7 questions</td>
</tr>
<tr>
<td>Budget participation</td>
<td>Involvement; Information; Autonomy; Influence; Contribution; Opinion.</td>
<td>Milani (1975)</td>
<td>6 questions</td>
</tr>
<tr>
<td>Procedural justice</td>
<td>Feedback; Salary increases; Performance evaluation; Promotions.</td>
<td>McFarlin and Sweeney (1992)</td>
<td>4 questions</td>
</tr>
</tbody>
</table>

The observable characteristics of the managers were measured according to the age; gender, which was dichotomous (1 = Male and 0 = Female); experience, i.e., time working in the hotel sector; duality, for those managers who also preside over the board of directors of the hotels; level of education; position at the time that the individual was working as a manager; training area, which refers to courses in the field of management (1 = Accounting, administration, and hospitality, 0 = Other courses).

Data on the budget participation variable were collected using the construct developed by Milani (1975), with 6 questions being measured using a 7-point Likert scale. Procedural justice is composed of 4 questions developed by McFarlin and Sweeney (1992).

The Structural Equation Modeling (SEM) technique, estimated from Partial Least Squares (Partial Least Squares - PLS), was used for data analysis using the SmartPLS software version 3.

The necessary sample size was estimated using the G * Power 3.1.9.2 software (Ringle, Silva & Bido, 2014), based on the following criteria: (i) greater number of independent variables, that is, the greater number of arrows that reach a dependent variable; (ii) effect size (average effect of 0.15); (iii) significance level of α = 5%; and (iv) the power of the sample of 1 - β = 0.8 (Cohen, 1977). There is a need for 77 responses so the sample of 94 valid participants is appropriate for analyzing the hypotheses and estimating the regression coefficients of structural modeling. Therefore, structural equation modeling is performed; in the first step, the measurement model is evaluated using the PLS algorithm while in the second step, the structural model is evaluated using bootstrapping and blindfolding.

4 ANALYSIS AND DISCUSSION OF RESULTS
4.1 Profile of respondents

Initially, the profile of high-level managers was checked, based on demographic variables (n = 94) for (i) Gender; (ii) Age; (iii) Length of employment in current organization; and (iv) Level of education.
Table 2

Respondents’ profile

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>Male</td>
<td>59</td>
<td>63</td>
</tr>
<tr>
<td>Length of employment in current organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 5 years</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td>From 5 years to 10 years</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 30 years</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>31 to 40 years</td>
<td>45</td>
<td>48</td>
</tr>
<tr>
<td>Above 40 years</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Technical education</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Undergraduate degree</td>
<td>39</td>
<td>42</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>45</td>
<td>48</td>
</tr>
</tbody>
</table>

Table 2 shows that there is a predominance of male (63%) respondents. Regarding age, 48% are between 31 and 40 years old and 34% are over 40 years old. This finding can be justified by the fact that, in the Brazilian organizational context, managers generally reach the top level after a certain period of work in the company, that is, they need to provide evidence of both their experience and their commitment to the organization (Santos, Anzilago & Lunkes, 2017).

As for length of employment in current organization, it appears that 45% of respondents have been working for up to 5 years in the company; 25%, between 5 to 10 years, and 30%, for more than 10 years. These results show that the previous statement can be confirmed, as 56% of managers have been working in the organization for more than 5 years. This result can be justified by the fact that, at the beginning of their career in the hotel sector, individuals usually have low-level positions, and as they acquire more experience, they may take higher-level positions in the hotel.

In terms of level of education, it was found that 90% of the respondents have a degree or more; particularly, 48% have a graduate degree and 42% have an undergraduate degree. Thus, it can be said that the managers have a high level of education, which demonstrates that, in the study hotels, qualified professionals are appreciated and desirable. It was also found that 43% of the managers are educated in business, which suggests that they are qualified for the position.

4.2 Measurement model

Generally, the PLS-SEM model is analyzed in two stages: the first one deals with the measurement model, and the second stage, with the structural model (Hair Jr., Hult, Ringle, & Sarstedt, 2016). In the measurement model, the criteria of validity (convergent and discriminant) and reliability (internal and external) are observed, in order to certify the measures of the constructs (Ringle, Silva & Bido, 2014).

The initial model has 3 constructs. It is noteworthy that, in the variable TMT, which refers to the elements linked to managers’ characteristics, it is accepted that the factorial loads of the elements Education and Gender are less than 0.5, since they are not variables constituted by a structure of questions. Table 3 shows the reliability and validity of the constructs.
Table 3
Reliability and discriminate validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach’s alpha</th>
<th>rho_A</th>
<th>Composite reliability</th>
<th>AVE</th>
<th>R²</th>
<th>Fornell and Larcker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural justice</td>
<td>0.946</td>
<td>0.950</td>
<td>0.961</td>
<td>0.861</td>
<td>0.152</td>
<td><strong>0.928</strong></td>
</tr>
<tr>
<td>Budget participation</td>
<td>0.957</td>
<td>0.959</td>
<td>0.965</td>
<td>0.823</td>
<td>0.410</td>
<td>0.590 <strong>0.907</strong></td>
</tr>
<tr>
<td>TMT</td>
<td>0.611</td>
<td>0.658</td>
<td>0.743</td>
<td>0.341</td>
<td>-</td>
<td>0.390 0.461 <strong>0.584</strong></td>
</tr>
</tbody>
</table>

Internal and composite reliability demonstrates the validity of the construct. Notably, the sample is reliable and has no bias, given that for the procedural justice construct, the Cronbach’s alpha was 0.95, which is indicative that its questions are convergent. Regarding budget participation, the Cronbach’s alpha was 0.96, which is classified as excellent. Thus, it appears that the elements of the construct are adequate. The variable TMT (particular characteristics of the respondents) has an alpha coefficient of 0.61. This index is below the minimum value recommended by Hair Jr. et al. (2016), who states that at least an alpha of 0.70 is required. However, this fact is justified in the variable TMT, given that it is composed of demographic variables and not a set of questions developed and properly tested. Therefore, it is accepted as an exception.

The discriminant validity criterion is observed in two ways: by Fornell and Larcker’s matrix test (1981) and by the cross-loadings matrix by Chin (1998). According to Hair Jr. et al. (2016), this shows how different the constructs are between them. Table 3 shows that the criteria of Fornell and Larcker (1981) were met, as the factors of each construct are greater than the previous ones when the matrix is checked from the horizontal axis. Table 4 shows compliance with the Cross Loading criterion.

Table 4
Cross Loading

<table>
<thead>
<tr>
<th>Items</th>
<th>PJ</th>
<th>BP</th>
<th>TMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PJ_1</td>
<td><strong>0.937</strong></td>
<td>0.597</td>
<td>0.370</td>
</tr>
<tr>
<td>PJ_2</td>
<td><strong>0.903</strong></td>
<td>0.539</td>
<td>0.383</td>
</tr>
<tr>
<td>PJ_3</td>
<td><strong>0.922</strong></td>
<td>0.481</td>
<td>0.318</td>
</tr>
<tr>
<td>PJ_4</td>
<td><strong>0.949</strong></td>
<td>0.560</td>
<td>0.372</td>
</tr>
<tr>
<td>BP_1</td>
<td>0.485</td>
<td><strong>0.887</strong></td>
<td>0.445</td>
</tr>
<tr>
<td>BP_2</td>
<td>0.577</td>
<td><strong>0.849</strong></td>
<td>0.284</td>
</tr>
<tr>
<td>BP_3</td>
<td>0.503</td>
<td><strong>0.915</strong></td>
<td>0.456</td>
</tr>
<tr>
<td>BP_4</td>
<td>0.531</td>
<td><strong>0.944</strong></td>
<td>0.489</td>
</tr>
<tr>
<td>BP_5</td>
<td>0.477</td>
<td><strong>0.922</strong></td>
<td>0.423</td>
</tr>
<tr>
<td>BP_6</td>
<td>0.624</td>
<td><strong>0.921</strong></td>
<td>0.405</td>
</tr>
<tr>
<td>LENGTH_EMP</td>
<td>0.256</td>
<td>0.279</td>
<td><strong>0.691</strong></td>
</tr>
<tr>
<td>OFFICE</td>
<td>0.267</td>
<td>0.459</td>
<td><strong>0.674</strong></td>
</tr>
<tr>
<td>DUALITY</td>
<td>0.169</td>
<td>0.153</td>
<td><strong>0.489</strong></td>
</tr>
<tr>
<td>Education</td>
<td>0.211</td>
<td>0.148</td>
<td><strong>0.395</strong></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.010</td>
<td>0.150</td>
<td><strong>0.366</strong></td>
</tr>
<tr>
<td>Age</td>
<td>0.325</td>
<td>0.267</td>
<td><strong>0.767</strong></td>
</tr>
</tbody>
</table>

Note 1: TMT: Managers’ characteristics; BP: Budget participation; PJ: Procedural justice
The factorial loads of the elements in their respective constructs are greater than in the others, that is, the Cross Loading criterion (which demonstrates that the research model is valid) was fulfilled (Chin, 1998).

Related to Average Variance Extracted (AVE), the model is considered to be satisfactory, with values greater than 0.5 (Ringle, Silva & Bido, 2014). The TMT variable presents an average variance index extracted below the minimum acceptable rate, since they are not unanimous questions, i.e., not a proper construct, but rather demographic characteristics.

### 4.3 Structural model

The analysis of the structural model provided insights into the relationships between the constructs and the connections, according to a diagram of paths that have statistical validity (Hair Jr. et al., 2016). This analysis allows to attest the significance between the relationships and to examine the hypotheses formulated in this research. According to Hair Jr. et al. (2016), the criteria analyzed in this stage are: (i) size and significance of the path coefficients; (ii) Pearson's determination coefficients (R²); (iii) effect sizes (F²) and; (iv) Predictive Relevance (Q²). For that purpose, Bootstrapping was applied to assess the significance of the relationships between the constructs and the blindfolding platform.

The execution of the techniques was performed using the parameter of 5,000 subsamples and 5,000 interactions in a Bias-Corrected and accelerated confidence interval at a significance level of 5% in a one-tailed test (Hair Jr. et al., 2016). Table 5 shows the values obtained from the execution of the two applied techniques.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Coef</th>
<th>T Statistic</th>
<th>P-Values</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMT → BP</td>
<td>0.272</td>
<td>2.995</td>
<td>0.003***</td>
<td>Support H1</td>
</tr>
<tr>
<td>PJ → BJ</td>
<td>0.483</td>
<td>4.561</td>
<td>0.000***</td>
<td>Support H2</td>
</tr>
<tr>
<td>TMT → BP</td>
<td>0.189</td>
<td>3.113</td>
<td>0.002***</td>
<td>Partial support H3</td>
</tr>
</tbody>
</table>

Table 5 shows that managers’ characteristics positively affect budget participation, given that the statistics provide evidence that confirms H1 at the 1% significance level (β = 0.272, p <0.01). These findings are congruent with those of Zor, Linder, and Endenic (2018), who also found a positive relationship between the characteristics of top managers in budgeting practices.

In the second hypothesis (the positive relationship between procedural justice and budget participation), there was a positive and significant relationship at the level of 1% (β = 0.483, p <0.01); therefore, the hypothesis is confirmed. These results indicate that the hotel managers’ perception of procedural justice allows them to actively participate in the preparation of the budget, as also stated by Lau and Lim (2007), Lau and Tan (2006) and Lindquist (1995).

For the third hypothesis, the aim was to test the mediation of procedural justice in the relationship between the observable characteristics of managers and budget participation. To
test the hypothesis, the precepts of Baron and Kenny (1986) were followed. The results show that the perception of procedural justice of managers in Brazilian hotels positively and significantly mediates the relationship between TMT and budget participation, according to statistics \( \beta = 0.189, p <0.01 \), which strengthens the findings of Ribeiro and Bastos (2010) and follows the recommendations of Nahatyo (2013) when these characteristics are associated.

It should be noted that, because the direct effect was positive and significant, as attested by H1, the mediation was partial (Bido & Silva, 2019). Thus, it can be affirmed that, in the indirect effect, procedural justice partially reinforces the relationship between the characteristics of the TMT and budget participation.

By analyzing Pearson's coefficient of determination (\( R^2 \)), it can be seen that procedural justice has an average effect of 15% and budget participation, 41%, which is considered to be a great effect. As for \( F^2 \), a measure that assesses the substantial impact on the dependent construct, when an independent construct is omitted from the model, a rate of 0.18 was found in procedural justice and 0.312, in budget participation. These results show an average effect.

As for \( Q^2 \), which determines how much the model approaches what is expected in its prediction (the more above zero it is, the better), the procedural justice presented a \( Q^2 \) of 0.12 and budget participation of 0.31. It appears, from these results, that there is a conformity of the adjusted model, as recommended by Hair Jr. et al. (2016).

### 4.4 Discussion of results

The present study examines the relationship between the observable characteristics of managers, procedural justice and budget participation. The results show that the observable characteristics of managers in Brazilian hotels have a positive influence on budget participation, which corroborates the findings of Zor, Linder, and Endenich (2018). It appears that when the managers present a satisfactory level of education (with some level of expertise in the area they work in), they tend to participate more in budget preparation, as reported by Child (1997); Hambrick and Mason (1984); Mendes et al. (2019); Menegazzo et al. (2017); and Naranjo-Gil and Hartmann (2007). It was also found that when management is diverse in terms of gender (e.g., Johnson & Powell, 1994), and managers have a certain maturity resulting their experience (e.g., Leach-López, Stammerjohan & Mcnair, 2008; Libby & Lindsay, 2010; Libby & Luft, 1993; Zonatto, 2014), they tend to increase their degree of participation in the budget.

Budget participation is essential for achieving the best managerial and organizational performance, as stated by Lidia (2015). Therefore, understanding how antecedent variables (e.g., the observable characteristics of the managers who participate in the budget) interferes with budget participation is important because it allows the performance of hotels to be leveraged. Thus, it can be suggested that demographic characteristics (e.g., age, position, level of education and experience in the position) are elements that have a positive and significant influence on budget participation.

It can be argued that many of these characteristics alone may not be sufficient to predict the effective participation of managers in preparing the budget. Consequently, the study adopted the perception of procedural justice and examined its relationship with budget participation. A positive influence was found; therefore, the investigated managers feel procedurally justified. This finding helps to explain the relationship tested. It appears that feeling valued by the organization enables managers to see themselves as part of it and actively carry out their activities.
In a complementary way, this study investigated the mediation of procedural justice in the direct relation tested. It was found that procedural justice intensifies the relationship between managers’ characteristics and budget participation (H3). Thus, it can be suggested that hotels need not only analyze age, length of experience, gender, and other demographic aspects, but also pay attention to the perception of justice. In other words, the work environment should be motivating, remuneration should be adequate, and there should be an incentive program that is not only extrinsic but also intrinsic.

In general, the research points out the observable characteristics of managers that influence budget participation and the extent to which Brazilian hotels provide a fairer work environment and greater participation in the organizational budget.

5 CONCLUSIONS

This research sought to examine the relationship between the observable characteristics of managers, perception of procedural justice and budget participation. For this purpose, a questionnaire was applied in Brazilian hotels, and 94 responses were received. Based on the data collected, the profile of the respondents was first analyzed; after that, the hypotheses were tested by considering the study variables (TMT, procedural justice and budget participation).

The results confirmed that there is a positive and significant relationship between the observable characteristics of managers and budget participation (H1), that procedural justice has a significant influence on budget participation (H2), and that procedural justice positively mediates the relationship between observable characteristics of managers and budget participation (H3).

In summary, it appears that the characteristics of TMT influence budget participation, from the moment that managers feel they are procedurally justified. It is argued that hotels need to discover the extent to which organizational actions contribute to making these managers feel satisfied with their work and engage and commit to the organization and actively participate in the preparation of the budget.

These results have both theoretical and practical implications. From a theoretical point of view, it brings further insights to the literature, since the observable characteristics of managers influence budget participation. This finding contributes further evidence to the research of Zor, Linder, and Endenich (2018). Therefore, the perception of procedural justice serves as a mediator by contributing to the intensification of this relationship. Thus, this research is innovative because, unlike other studies that have adopted distributive justice as a mediating variable, it observes justice that results from procedures in the workplace. By observing it as a mediating variable, it intensifies the relationship between the observable characteristics of managers and budget participation.

From a practical point of view, there are implications for the management of hotels. When there is a better understanding of the characteristics of managers and how they interfere with their preferences, budget-related decisions become more assertive. It was also found that hotels need to offer their managers a healthy and fair work environment in the processes resulting from management activities. Based on these observations, it is possible to contribute to society, because better performance by managers leads to increased organizational performance and contributes to the social environment around hotels.

As a scientific study, methodological choices are often configured as limitations. One of the limitations of this research is the fact that, since it is a questionnaire, the data are prone to answer and/or method bias. However, the application of multiple measures and the high
response rate mitigate such biases (Podsakoff & Organ, 1986). In addition, because they are self-assessments, they are subjective analyses, even if they are abundantly used in budget research.

Future research could be focused on the individualized analysis of each characteristic and its relationship with procedural justice and budget participation. In addition, the use of other methodological techniques is also important to mitigate the limitations highlighted above.

REFERENCES


RESUMO

Objetivo: Examinar a relação entre características dos gestores, percepção de justiça processual e participação orçamentária.

Método: Foi realizado uma survey com 94 gestores de grandes hotéis do Brasil. Adotou-se a técnica de Modelagem de Equações Estruturais para análise dos dados, realizado no software SmartPLS versão 3.

Originalidade/Relevância: A proposta denota que as decisões tomadas durante o processo orçamentário estão relacionadas com características dos gestores como idade, gênero, nível e área de formação, nível hierárquico, tempo no cargo e dualidade. Estas por sua vez, exercem influência sobre a participação orçamentária e a percepção de justiça processual. A relevância da pesquisa está em verificar a mediação da justiça processual na relação entre as características dos gestores e a participação orçamentária.

Resultados: Os resultados indicam que as características dos gestores e a percepção de justiça processual possuem relação direta e positiva com a participação orçamentária. A percepção de justiça processual apresenta também, relação mediadora entre as características dos gestores e participação orçamentária. Estes achados reforçam a importância de considerar as características dos gestores bem como a percepção de justiça processual para que as organizações alcancem seus propósitos com o auxílio da participação orçamentária, gerando assim, um círculo virtuoso para os envolvidos.

Contribuições teóricas/metodológicas: Agrega-se a literatura que cerca o tema, ao considerar que há ainda pouco conhecimento de como a justiça processual pode mediar esta relação entre características dos gestores e participação orçamentária.

Contribuições sociais/para a gestão: Contribui-se para a gestão dos hotéis, visto que um setor caracterizado por um alto nível de concorrência e risco, no qual a eficiência do processo orçamentário pode ser um importante fator para o sucesso organizacional.

Palavras-chave: Teoria dos Escalões Superiores (TES); Características dos gestores; Participação Orçamentária; Justiça Processual; Hotéis.