The Influence of Formal and Informal Controls and Confidence on Organizational Commitment

Marines Lucia Boff
https://orcid.org/0000-0001-8424-1095 | E-mail: marines.boff@udesc.br

Carline Rakowski Savariz
https://orcid.org/0000-0002-0062-1566 | E-mail: carlinerakowski@gmail.com

Ilse Maria Beuren
https://orcid.org/0000-0003-4007-6408 | E-mail: ilse.beuren@gmail.com

Abstract

Objective: The implications of formal and informal controls and confidence in organizational commitment represent an important gap in the literature due to the potential effect on employees' performance. Even though previous studies report a significant relationship between formal and/or informal controls and confidence and/or organizational commitment, the effect of organizational confidence in this relationship demands further research. Hence, this study's objective was to analyze the influence of formal and informal controls on organizational commitment, mediated by organizational confidence.

Method: A survey was conducted among the managers of the 150 Best Companies to Work For, identified in social media *LinkedIn*. Of the 746 individuals invited, 219 accepted and received a link to the questionnaire; a total of 84 valid responses were obtained. Instruments validated by Goebel and Weißenberger (2017) and Verburg, Nienaber, Searle, Weibel, Hartoge Rupp (2018) were used to measure the constructs. Structural Equations Modeling was used to test the hypotheses.

Results: This study's results show that formal and informal controls influence organizational commitment, and organizational confidence mediation has an indirect effect on this relationship. It indicates that interactions between formal and informal controls with organizational commitment are reinforced by organizational confidence.

Contributions: These results broaden the scope of analysis of the effect of organizational confidence as a factor that enhances the influence of formal and informal controls on organizational commitment. Hence, this study contributes to the joint analysis of these constructs considering evidence of the effect of controls on employees' behavior.

Keywords: Formal and Informal Controls. Organizational Confidence.OrganizationalCommitment.

1. Introduction

Storey (1985) stressed that the problem of studies related to Management Control Systems (MCS) is not about improving control, but instead how they serve as control devices. From this perspective, Widener (2019) note that studies addressing MCS investigate its planning characteristics, use, and relationship with employees' behavior. One of the primary purposes of management control in decision-making is to align the individuals' behaviors to the organization's goals (Sprinkle, 2003) using formal and informal controls, which constitute an organization's MCS (Otley, 1980).

One of an organization's essential intangible dimensions is the quality of the coordination and coherence of its members' behavior (Guibert & Dupuy, 1997). Tayler and Bloomfield (2011) argue that despite managers using monitoring mechanisms and incentives to induce a given behavior among employees, formal control mechanisms are restricted due to a lack of data precisely indicating how and when these influence and what the psychological motivations are. Regarding this aspect, Khodyakov (2007) highlights that confidence relationships make people less vulnerable in terms of their coworkers' expected behavior (though not mandatory), acting according to the organizations' best interest.

When analyzing how formal and informal controls are related to the MCS and organizational commitment and how these influence organizational performance, Goebel and Weißenberger (2017) verified that informal control mechanisms strongly contribute to the MCS's greater efficacy and organizational commitment levels, which in turn, lead to superior organizational performance. These results indicate a greater dependency of modern organizations on (personal and cultural) informal control mechanisms than (result and action) on formal mechanisms (Goebel & Weißenberger, 2017) and, therefore, their importance as management controls.

It is essential, in this context, to understand the role of individuals in organizations regarding formal and/or informal controls. From this perspective, understanding individuals' organizational commitment and its relationship with organizational confidence is a step ahead of accounting studies, considering that in recent decades, confidence has been emphasized as one of the leading resources promoting organizational performance, as it reflects on the individuals' attitude at work (Baek & Jung, 2015).

Organizational confidence should be considered in managerial practices because it can affect workplace results (Zhang, Tsui, Song, Li & Jia, 2008). Confidence is a latent construct composed of three dimensions: confidence between managers and employees, confidence among coworkers, and organizational confidence (Yandra, 2017). Note that interpersonal confidence (between individuals) differs from organizational confidence because, even though an individual may clearly understand interdependence and the risks associated with dealing with others, these risks are more significant and more ambiguous in the case of an organization (Weibel, Den Hartog, Gillespie, Searle, Six& Skinner, 2016). It is unclear what needs to be judged in terms of organizational confidence, who are those responsible for actions and how these actions make employees vulnerable (Weibel *et al.*, 2016).

Investigating "organizational behavior is important because it considers the subjectivity and behaviors of individuals within organizations" (Vieira, Anjos & Silva, 2016, p. 153). In this aspect, Yao, Qiu, and Wei (2019) highlight that organizational commitment is based on formal and informal interactions between individuals and organizations, suggesting a relationship between organizational confidence and commitment. However, Batac and Carassus (2009) note that new issues emerge, such as a search to formalize control, though flexible enough to adjust to environmental changes. Otley (2016) argues that current literature is interested in the effects that different MCS configurations exert on the behaviors of individuals and organizations.

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From this perspective, previous studies investigate relationships between one or some MCS Elements and organizational confidence (Weibel *et al.*, 2016; Verburg *et al.*, 2018), organizational commitment(Sholihin&Pike, 2010; Goebel & Weißenberger, 2017),and organizational confidence and commitment (Beuren, Klein, Lara & Almeida, 2016). Other studies analyze the mediator effect of organizational confidence on the relationship between interpersonal confidence and organizational commitment (Baek& Jung, 2015)and the relationship between social and economic exchange with organizational commitment (Ozmen, 2019), as well as the relationship between organizational confidence and commitment (Yandra, 2017). Therefore, the implications of formal and informal controls and employees' confidence with organizational commitment remain a research gap.

Even though previous studies focused on the relationship between the MCS elements and organizational confidence and/or commitment, it remains to be clarified how organizational confidence interferes with their relationship between formal and informal controls and organizational commitment. In this sense, the following research question is proposed: what is the influence of formal and informal controls and organizational confidence on organizational commitment? Hence, this study aims to analyze the influence of formal and informal controls on organizational commitment, mediated by organizational confidence. This study included the managers of the 150 Best Companies to Work For based on the assumption that these companies have structured formal and informal controls with managers involved with confidence and commitment behaviors.

Research in management accounting can help to determine the extent to which social motives, individual values, and the companies' informal controls interact with formal management procedures, ensuring that employees act according to the organization's best interest (Sprinkle, 2003). This study considers the effect of formal and informal controls on employees' behavior. Malmi and Brown (2008) state that the components of an MCS do not work in isolation and the effect of one component should be considered in the context of other MCS components. Considering that some are inherent to accounting and other related areas, it is essential to understand how they complement each other.

This study contributes to the literature by revealing the mediator effect of organizational confidence on the relationship between formal and informal controls with organizational commitment. Otley (2016) highlights that researchers expanded the dependent and independent variables analyzed in the MCS context over the years, giving more emphasis to independent variables than dependent variables. Therefore, this study contributes to studies seeking to show how the relationship of MCS and results is explained by intervening variables, as suggested by Chenhall (2003).

It also contributes to managerial practice as organizations have to understand how confidence and control are related, and how to prevent adverse control effects on confidence (Weibel *et al.*, 2016). These authors consider that MCS is conceived in the literature as the primary way to influence employees' confidence and commitment. By confirming the relationship between formal and informal controls and organizational commitment, mediated by confidence, we draw attention to the fact that the employees' expectations and behaviors should be considered in the MCS context, considering these can enhance organizational confidence.

2. Literature Review

2.1 Formal and informal controls and organizational confidence

Organizational control comprises the specification of patterns to align the employees' actions to the organizations' goals by influencing them to act and make decisions that are consistent with organizational goals (Flamholtz, Das & Tsui, 1985). Organizations use a combination of mechanisms to control peoples' behavior, including supervision of employees, operational procedures standards, descriptions of functions, performance measurement, and reward systems (Flamholtz *et al.*, 1985). In this sense, MCS can be used to control workgroups at all organizational levels.

The of MCS' *raison d›être* is to increase the probability of people internalizing organizational goals and working to achieve those goals (Flamholtz *et al.*, 1985). According to Ansari (1977, p. 102), MCS represents "organizational arrangements and actions designed to encourage its members to perform better with less not-intentional consequences". On the other hand, Sprinkle (2003) highlights that an organization's MCS plays a vital role in motivating employees and improving their judgments and decisions.

MCS configures formal and informal control practices (Verburg *et al.*, 2018). Formal controls include rules, operational procedure standards, and systems intended to ensure that specific results are achieved, involving monitoring, measurement, and corrective actions (Langfield-Smith, 1997). In turn, informal controls include an organization's unwritten policies, which often derive from organizational culture (Langfield-Smith, 1997). Informal controls are important MCS elements, considering that formal controls' effectiveness may depend on the nature of informal controls (Otley, 1980; Flamholtz *et al.*, 1985).

Goebele &Weißenberger (2017) highlight that management controls are intended to meet diversified organizational goals, using formal outcome controls and employees' actions, in addition to informal controls inherent to employees and the organizational culture. The authors explain that formal outcome controls consist of goal indicators to monitor and assess employees' performance, while employee action controls are intended to ensure that activities align with organizational goals, policies, and procedure manuals. Informal personnel controls denote the selection and hiring context, training programs, and employee assessment, while cultural controls comprise organizational standards, beliefs, and values that may influence employee behavior.

However, Guibert and Dupuy (1997) suggest a relationship between the formal and informal management controls. According to them, while formal control is considered a replacement to informal control, the logic of which is to constantly find balance by using one type or another, informal control is based on the principle of complementarity. According to Batac and Carassus (2009), informal management tools can complement instead of replacing traditional (formal) controls.

If strict formal controls may undermine organizational confidence because they reduce employees' autonomy, formal controls may promote reliable relationships. From this perspective, confidence and control complement each other (Khodyakov, 2007). Schoorman, Mayer, and Davis (2007) note that strict formal control may inhibit organizational confidence by suggesting that employees only comply with control demands instead of acting according to honorable intentions.

It is unclear how organizational confidence is related to control (Weibel *et al*., 2016). Hartmanne & Slapnicar (2009) conducted a study in which they established and tested a model to verify the relationship between formal controls and confidence to verify whether formal controls influence confidence. They found that formal controls of performance evaluations influence interpersonal confidence. Verburg *et al*. (2018) investigated organizational confidence as a result of managerial control and concluded that organizational confidence might result from managerial control, considering it can lead to a perception of organizational zeal, promoting confidence. From this perspective, confidence and control produce each other (Khodyakov, 2007). Therefore, based on the previously mentioned studies, the first hypothesis is proposed:

H$_1$:Formal and informal controls are positively and significantly related to organizational confidence.

2.2 Organizational confidence and organizational commitment

Confidence in the organizational environment involves various stakeholders, including individuals (confidence in a supervisor or colleague), specific groups (managers, coworkers, work teams/ groups), or the organization as a whole (Schoorman, Mayer & Davis, 2007). Organizational confidence is established between individuals and organizations or the organizational units in which they work (Baek & Jung, 2015). The collective represents organizational confidence, instead of a single person, differing from interpersonal confidence (Weibel *et al*., 2016).

If organizational confidence means positive expectations regarding an organization (Tan & Tan, 2000), we have to consider the influence of behavioral measures (Baek & Jung, 2015). Confidence derives from the employees' evaluation of whether the organization is competent to achieve goals and fulfill responsibilities reliably (organizational capacity), signalizes positive intentions regarding the wellbeing of stakeholders (corporate benevolence), and adhere to socially accepted moral principles (organizational integrity) in their relationship with different stakeholders (Gillespie & Dietz, 2009; Searle, Den Hartog, Weibel, Gillespie, Six, Hatzakis & Skinner, 2011).

Confidence is critical for organizations (Verburg *et al*., 2018). It is vital when the work conditions of an organization's members require collaboration (Coletti, Sedatole & Towry, 2005). Confidence intensifies knowledge exchange among workers and promotes cooperation and commitment within organizations (Dirks & Ferrin, 2001; Fulmer & Gelfand, 2012). Trusting employees are more committed and stay longer in organizations, work more intensively, and are more cooperative, sharing knowledge and efficiently solving problems (Weibel *et al*., 2016).

Therefore, organizations seek to ensure that operations are performed without problems, goals are achieved efficiently, and workers cooperate with managers and with each other (Khodyakov, 2007). However, "an organization may facilitate or hinder the development of commitment" (Arraes, Cabral, Santos, Silva & Penha, 2017, p. 69). Yandra (2017) reports that evidence that confidence is positively related to organizational commitment. Consequently, organizational confidence is a means through which managerial practices can affect workplace outcomes (Zhang *et al*., 2008).

Lau and Sholihin (2005) found a positive and significant relationship between organizational confidence and job satisfaction, but not between confidence and organizational commitment. SholihinandPike (2010) perform a similar study, however with a different research objective, finding divergent results. They found a positive and significant relationship between confidence and organizational commitment but not between organizational confidence and job satisfaction. Pranitasari (2020) found a positive effect of organizational confidence on organizational commitment and motivation at work. Despite some inconsistencies, these studies results supported the second hypothesis:

H₂:Organizational confidence is positively and significantly related to organizational commitment.

2.3 Formal and informal controls, confidence, and organizational commitment

Chenhall (2003) conducted a systematic review on MCS, suggesting that studies may identify antecedents or demonstrate how the relationship between MCS and outcomes is explained by intervening variables. Studies addressing the relationship between controls and confidence in organizations became relevant in this theoretical debate (Khodyakov, 2007; Weibel *et al.*, 2016; Verburg *et al.*, 2018), considering that incomplete control measures (e.g., rewards and performance) can motivate dysfunctional behavior (Widener, 2019). The assumption is that employees' level of confidence in an organization can influence their attitudes (Baek & Jung, 2015).

Concerns with individual attributes may be combined with the organizational context, examining compatibility between individuals and their work situation (Chenhall, 2003). A harmonious work environment promotes a greater exchange of information among the individuals of an organization and communication and collaboration, leading workers to help each other in the face of difficulties (Yandra, 2017). Thus, it is likely that personality, cognitive style, and factors associated with commitment and confidence help explain how individuals react to information (Chenhall, 2003).

Even though no studies were found addressing the mediator effect of confidence on the relationship between formal and informal controls with organizational commitment, evidence suggests a positive relationship. Hartmann and Slapnicar (2009) verified that formal performance evaluation controls influence interpersonal confidence, mainly because it improves perceived quality in the workers' feedback. Verburg *et al.* (2018) found that quality management controls, directly and indirectly, improve workers' performance due to organizational confidence mediation. It indicates that the relationship between control and confidence is subjected to the way behavior is controlled.

Organizational commitment should be seen as a relationship in which workers tend to act and contribute to organizations (Oliveira &Rowe, 2018). Yandra (2017) states that loyalty to an organization reflects each individual's organizational commitment. Workers who identify themselves with their organizations and are highly committed are more likely to contribute to organizational goals (Davis, Schoorman & Donaldson, 1997; Hernandez, 2008) and promote superior organizational performance (Goebel & Weißenberger, 2017). Yao *et al.* (2019) verified that organizational commitment develops from formal and informal interactions between individuals and organizations, suggesting a relationship between organizational commitment and confidence. Ozmen (2019) found that social and economic exchange relationships with organizational commitment are mediated by confidence.

Considering that previous studies suggest a positive influence of formal and informal controls on organizational confidence (Weibel *et al.*, 2016; Verburg *et al.*, 2018) and organizational confidence on organizational commitment (Sholihinj & Pike, 2010; Baek & Jung, 2015; Yandra, 2017; Ozmen, 2019), even though some studies did not report a relationship between organizational confidence and organizational commitment (Lau & Sholihin, 2005), in this study, we assume that organizational commitment mediates the relationship between formal and informal controls and organizational commitment. Therefore, the following hypothesis is proposed:

H₃: Formal and informal controls are positively and significantly related to organizational commitment, the relationship of which is mediated by organizational confidence.

Figure 1 presents this study's theoretical model in which the causal relationship between the constructs (independent/ dependent) is highlighted along with the hypothesis.
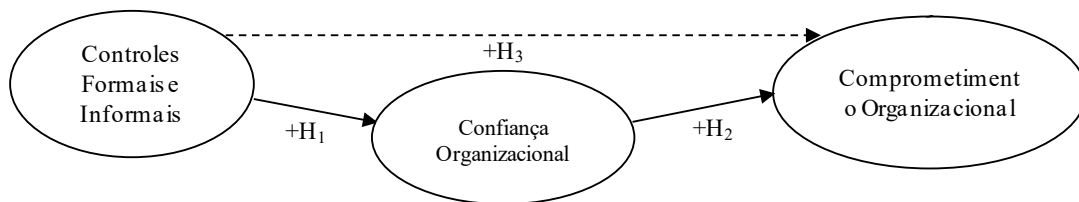
Translation: Formal and Informal Controls, Organizational Confidence, Organizational Commitment.

Figure 1. Theoretical model

Source: developed by the authors.

Figure 1 represents the theoretical model in which formal and informal controls are positively related to organizational confidence, and organizational confidence is positively related to organizational commitment. The model also predicts that confidence mediates the relationship between informal and formal control and organizational commitment. Previous studies show that, in general, organizations depend on many and different control mechanisms, which in turn should be simultaneously analyzed to verify their respective distinct and relative effects (Goebel&Weißenberger, 2017).

3. Method

This study was conducted through a survey addressing the 150 Best Companies to Work For, 2018 ranking, identified in social media *LinkedIn*. This population was chosen because the employees evaluate the companies that voluntarily subscribe to the annual ranking. Thus, we assume that companies standing out in the management of people and a good organizational environment, from the employees' perspective, tend to enjoy organizational confidence and commitment.

Initially, the companies' names were searched in social media *LinkedIn*, then the companies' lists of employees were verified using the filters' Profile Language' and 'Job Title', defining them 'Portuguese' and 'Manager', respectively. In the absence of workers with a manager job title, analysts, controllers, those responsible for controllership, or supervisors were selected to a maximum of five people per company. The selection of employees in management positions accrues from assuming these employees have sufficient knowledge to answer questions related to the companies' MCS.

After identifying the employees in management positions, the next step was to send an invitation to enter social media *LinkedIn,* created explicitly for this study. Of the 746 invitations sent, 484 were accepted. As the invitations were answered, the individuals were asked about their availability to participate in this study. The link to the questionnaire was sent to the 219 individuals who consented to participate. The questionnaire remained available in Google forms from February to April 2019. Confidentiality of information was ensured. The final sample comprises 84 valid responses, i.e., higher than the minimum sample size of 68 answers, calculated using G*Power, as recommended by Ringle, Silva, and Bido (2014).

Research instruments validated in previous studies were used in this study to measure the study's construct, as shown in Table 1.

Table 1
Study's constructs

Constructs		Description	Authors
Controls	Formal	Formal controls based on explicit and quantifiable standards.	Goebel e Weißenberger (2017)
	Informal	Non-explicit or formal controls, which indirectly integrate a company's controls.	Goebel e Weißenberger (2017)
Organizational confidence		Refers to the employee perception that an organization is reliable in terms of confidence and goodwill.	Verburg *et al*. (2018)
Organizational commitment		Refers to the employees' commitment and level of identification with the company.	Goebel e Weißenberger (2017)

Source: Developed by the author.

Considering this study's objective, not all constructs presented by Goebel and Weißenberger (2017) were adopted, such as the efficacy of the MCS on organizational performance. Neither were considered all the constructs from Verburg *et al*. (2018): outcome controls, normative controls, performance controls, and behavior controls. All the items used by Goebel and Weißenberger (2017) concerning formal control variables (outcome controls, five items; action controls, five items), informal controls (personnel controls, five items; cultural controls, six items), and organizational commitment (five items) were adopted. To measure organizational commitment, De Verburg *et al*. (2018) used a 10-item instrument to measure organizational confidence.

The instruments were translated from English to Portuguese and back-translated to ensure that the Brazilian version would be equivalent to the original. The number of the scales' items, along with redaction (scales' names), was slightly adjusted, without, however, sacrificing purpose or measurement ability. Hence, the study's instrument comprises 36 statements rated on a five-point Likert scale (Appendix A) so that the respondents would choose the item that better corresponded to their organizations' context. Four questions were added to the instrument to characterize the participants.

According to Curado, Teles, and Marôco (2014), the discussion regarding the scale's number of items in a questionnaire, whether it is even or odd, is irrelevant. Although, they suggest that when seeking or developing an instrument, one should prioritize measures with at least five points to increase the participants' responses and improve the sum of items. When assessing how easy, fast, or precise different scales are, Dalmoro and Vieira (2013) verified that a five-point scale is more appropriate because it is as precise as a three-point scale, but it is easier and faster to process than a seven-point scale.

Collected data were submitted to descriptive statistics and structural equation modeling (SEM) estimated by Partial Least Square (PLS), using Smart PLS. PLS-SEM overcomes the technical limitations of other traditional statistics. According to Ringle *et al.* (2014, p. 57), this technique enables "estimating more complex models with fewer data", with several relationships (HairJr., Hult, Ringle & Sarstedt, 2014), as is the case here. Like Goebel and Weißenberger (2017) and Verburg *et al.* (2018), the basis of variance in the PLS approach was associated with many distinct characteristics that supported this study.

4. Analysis of results

This section presents the results of the statistical procedures. It describes the respondents' profile and then proceeds with the validation of the structural model and measurement model, finally discussing the results. Note that the PLS algorithm is based on the simultaneous calculation of several measurement models, that is, the relationships between indicators and respective latent constructs, in addition to the structural model that quantifies the relationship between these variables (Ringle *et al.*, 2014).

Table 2 presents the respondents' characteristics, highlighting gender, how long the individuals spent in the function, educational level, and background.

Table 2

Respondents' characteristics

Gender	Frequency	%	Education	Frequency	%
Female	21	25%	Bachelor's degree	23	27%
Male	63	75%	Graduate studies	61	73%
			Background	**Frequency**	**%**
Experience in the function	**Frequency**	**%**	Business administration	**22**	**26%**
0 to 5 years	52	61%	Engineering	12	14%
6 to 10 years	15	18%	Accounting	11	13%
11 to 20 years	15	18%	Informatics/IT	7	8%
More than 20 years	2	3%	Social Communication	11	13%
			Other	21	26%

Note: N=84.

Source: study's data.

Table 2 shows that 75% of the respondents were men. Most worked in the position for five or fewer years (61%). Regarding their educational background, most had attended a specialization program. Note that educational backgrounds vary, though most reported Business Administration. This profile suggests the participants were apt to answer the study's instrument, mainly because more than one-third worked in managerial positions for more than five years, and most had a background in the business field.

4.1 Measurement Model

The modeling had a second-order variable (formal and informal controls), composed of four first-order variables (outcome controls, action controls, personnel controls, and cultural controls), the operationalization of which occurred through repetition of indicators (Bido & Silva, 2019). Table 3 presents the criteria to assess convergent and discriminant validity and internal consistency of the first- and second-order latent constructs. Note that the Average Variance Extracted (AVE) and Composite Reliability (CR) of the second-order construct were calculated separately, as explained by Bido and Silva (2019). The second item of the cultural controls was excluded for not meeting goodness of fit requirements.

Table 3

Reliability indicators and construct validity

	Construtos	AVE	CR	AC	1	2	3
	Panel A – VL de primeira ordem						
CF	1. Outcome Controls	0,575	0,871	0,815			
	2. Action Controls	0,692	0,918	0,886	0,741		
CI	3. Personnel Controls	0,744	0,936	0,914	0,707	0,708	
	4. Cultural Controls	0,715	0,926	0,900	0,711	0,694	0,796
	PanelB – LV of the structural model						
COR	1. Organizational confidence	0,663	0,851	0,942			
CORG	2. Organizational commitment	0,666	0,909	0,874	0,881		
CFI	3. Formal and informal controls	0,735	0,917	0,946	0,893	0,833	

Note: LV = Latente variable; AVE=Average Variance Extracted; CR = Composite Reliability; CA = Cronbach's alpha; FC = Formal Controls; IC = Informal Controls;OCO = Organizational Control; OCOM = Organizational Commitment; CFI = Formal and Infomal Controls.

Source: study's data.

Coherent with the confirmatory factor analysis, the items' factor loadings were above 0.60 in their respective constructs, which shows adequacy (Hair Jr., 2014). Internal consistency was verified through Cronbach's alpha (CA) and CR, both with indexes above 0.70 (Hair Jr., Risher, Sarstedt & Ringle, 2019). Convergent validity was verified with AVE, with values above 0.50. Discriminant validity was verified using the heterotrait-monotrait ratio of correlations (HTML) in the last three columns of Table 3, in which the indexes are lower than 0.90 (Hair Jr. *et al.*, 2019).

4.2 Structural model

After assessing the measurement model and validating the constructs, we proceeded with analyzing the structural models' goodness of fit and the study's hypothesis. The first step was assessing convergent validity using the Bootstrapping technique with 5,000 interactions to estimate the significance (p-value) of the relationships between variables and their respective constructs (Preacher& Hayes, 2008; Ringle *et al.*, 2014); that is, the extent to which each construct influences the correspondent construct (Hair Jr. *et al.*, 2014). Table 4 presents the relationships and respective hypotheses.

Tabela 4

Analysis of the structural model and hypotheses

Relationships	Hypothesis	Coef.	t-value	p-value
Formal and informal controls → Organizational confidence.	H[1]	0,855	25,932	**0,000***
Organizational confidence → Organizational commitment	H[2]	0,590	5,120	**0,000***
Formal and informal controls → Organizational commitment		0,262	2,208	**0,027****
Formal and informal controls and Organizational confidence → Organizational confidence → Organizational commitment.	H[3]	0,505	5,013	**0,000***

Note: **p<0.05; *p<0.01.
= Organizational confidence (0.729); Organizational commitment (0.674).
= Organizational confidence (0.468); Organizational commitment (0.434).

Source: study's data.

Coefficients and were used to respectively confirm the predictive relevance and accuracy of the structural model. A higher than zero for a given construct indicates the model's predictive relevance for this construct(Hair Jr. *et al.*, 2014). The closer to 1 (=1), the better the model reflects reality (Ringle *et al.*, 2014). indicates that this model has predictive power, considering its values are higher than zero.

Note that formal and informal controls (FIC) positively and significantly influence organizational confidence (OCO) (H1, coef.=0.855, p<0.01); organizational confidence (OCO) positively and significantly influences organizational commitment (OCOM) (H2, coef.=0.590, p<0.01). Regarding H3, formal and informal controls (FIC) showed a direct effect on organizational commitment (OCOM) (coef.=0.262, p£0.05), in addition to an indirect effect through organizational confidence (OCO) (coef.=0.505, p<0.01). Partial mediation is assumed, considering the direct and indirect effects are significant (Bido & Silva, 2019). Note, however, that the relationship in question is strengthened when mediated by organizational confidence, going from a beta coefficient of 0.262 to 0.505.

4.3 Discussion of results

This study's results show that hypothesis H1, which predicts that formal and informal controls are positively and significantly related to organizational confidence, presents sufficient evidence not to be rejected. These results corroborate with those reported by Hartmann and Slapnicar (2009), indicating that confidence can be achieved through management controls, though the connection between both (controls and confidence) is fragile and depends on how behavior is controlled. These results are also in line with Weibel *et al.* (2016), whose results show that controls are positively related to organizational confidence. The relationship between controls and organizational confidence differs depending on how well controls are implemented; poorly implemented controls can undermine confidence.

According to Sprinkle (2003), management controls play an important role in motivating employees and improving their judgments and decisions. The author argues that because a diversity of individuals composes an organization, employees' wellbeing is inextricably linked to their judgments. While restricted to the individuals' sphere, though in the same direction, Hartmann and Slapnicar (2009) found that interpersonal confidence promotes a positive workplace. In this study, the managers' perceptions agree with the effects of formal and informal controls on the employees' organizational confidence.

Hypothesis H$_2$, which predicts that organizational confidence is positively and significantly related to organizational commitment, presents sufficient evidence not to be rejected. These results corroborate those reported by Ozmen (2019) and Pranitasari (2020), that there is a positive effect of organizational confidence on organizational commitment. The results also confirm the results reported by Yao *et al.* (2019), that a solid basis of mutual confidence between employees and employers is efficacious to keep employees' satisfaction, develop a sense of attachment, belonging, morality, and responsibility toward the organization. The authors state that for confidence and commitment to occur, companies should respect and take care of their employees, establishing a sense of mutual belonging.

The results are also in line with Yandra (2017) regarding the importance of confidence as an informal control element, which explains the positive relationship between control and the behavior of an organization's members. Positive expectations derived from confidence encourage the emergence of positive individual behavior, intensifying individual commitment. Dirks & Ferrin (2001) and Verburg *et al.* (2018) state that confidence is critical for organizations since it intensifies knowledge exchange between employees and promotes cooperation and commitment with organizations.

Zhang *et al.* (2008) found that trustworthy environments can affect management controls. Controls contribute to affirming a company's reputation among stakeholders, which in turn affects employees' confidence. It suggests that an organizational environment conducive to greater confidence determines satisfaction and commitment at work. Weibel *et al.* (2016) highlight that confidence within a company reflects greater commitment among employees, leading employees to spend more time at work, thus, contributing to the company's performance. Therefore, the results regarding hypothesis H2 are in line with the literature.

Finally, hypothesis H$_3$ predicts that formal and informal controls are positively and significantly related to organizational commitment, whose relationship is mediated by organizational confidence, and obtained sufficient evidence not to be rejected. These results partially agree with Baek and Jung (2015), which analyzed the mediator effect of organizational confidence on the relationship between interpersonal confidence and organizational commitment. Interpersonal confidence promotes organizational commitment only if mediated by organizational confidence.

Goebel and Weißenberger (2017) found that different (formal and informal) control mechanisms are positively and significantly related to organizational commitment, especially action and outcome informal controls. The authors note that jointly considering formal and informal controls provides evidence that the MCS elements are essential to promote the desired behavior among workers and create sustainable value.

Sholihine & Pike (2010) reiterate the significant role of organizational commitment in MCS efficacy. Gualinga and Lennartsson (2020) emphasize that MCS depends on internal factors, such as commitment. Davis *et al.* (1997) and Hernandez (2008) verify that employees who strongly identify themselves with their organizations and present high commitment levels are more likely to contribute to organizational goals. This study's findings revealed that the use of different performance measures, financial and non-financial measures, lead to different behaviors, in this case, organizational confidence and commitment.

The literature draws attention to trade-offs between formal control mechanisms, prone to reward-driven, and formal control mechanisms as a way to identify culture, honesty, and confidence (Yandra, 2017). Hence, confidence is essential when the members of organizations are in a situation at work that requires collaboration (Coletti *et al.*, 2005), showing that a notion of confidence seems to find a balance between formal and informal controls (Guibert & Dupuy, 1997).

The literature reports evidence that formal and informal controls influence the commitment of workers. This study's results align with the literature, as they show the positive effect of these constructs and the mediator role of organizational confidence. Therefore, the perceptions of the managers of the 150 Best Companies to Work For, who took part in this study indicate that there is job satisfaction, and according to the positive and significant relationships found here, the management control adopted is sufficient to impact organizational commitment positively, considering these employees trust the company to which they work.

5. Final considerations

The influence of formal and informal controls on organizational commitment, mediated by organizational confidence, was analyzed in this study. The results show that formal and informal controls positively and significantly influence organizational confidence, while organizational confidence positively and significantly influences organizational commitment. It suggests is that this is how formal and informal controls interact with organizational confidence, and organizational confidence with organizational commitment in the 150 Best Companies to Work For addressed in this study, according to the participants' perceptions.

The results also reveal that organizational confidence mediates the relationship of formal and informal controls with organizational commitment, suggesting that the employees' confidence leads to organizational commitment, which according to Weibel *et al.* (2016), leads workers to stay longer in organizations, work harder and more collaboratively, share knowledge, and solve problems more efficiently. In this aspect, this study's participants report converging perceptions in the context of the companies to each they work for, considering all the hypotheses were confirmed.

Therefore, this study's results contribute to previous literature by reinforcing the positive relationship existing between management controls and organizational confidence (Khodyakov, 2007; Hartmann & Slapnicar, 2009; Weibel *et al.*, 2016; Verburg *et al.*, 2018), and the positive relationship between confidence and organizational commitment (Sholihin & Pike, 2010; Baek & Jung, 2015; Goebel & Weißenberger, 2017; Yandra, 2017; Yao *et al.*, 2019). It mainly reveals that organizational confidence mediates the relationship between formal and informal controls and organizational commitment. This finding is a potential explanation for divergent results report by previous studies.

These results also contribute to the management practice. Once companies understand that employees' confidence in their organization enhances the effectiveness of formal and informal controls on organizational commitment, they can adopt practices that promote organizational confidence and commitment among workers. This way, managers can obtain superior performance from their workers, improving organizational performance. Possibly this is the context in which the best companies work, considering that the relationship of the variables proposed here is positive and significant. The sample characteristics show evidence, considering that most participants work in their respective companies for more than five years, reflecting management controls, commitment, and confidence, as reported in the literature.

This study's limitations encourage further research. Some variables from Goebel and Weißenberger (2017) were not considered here, such as the MCS efficacy, and from Verburg *et al.* (2018), like normative controls. The direction of causality between the constructs was not tested. Thus, future studies can investigate whether formal and informal controls are antecedents and/or consequences of organizational confidence, as suggested by Verburg *et al.* (2018), in addition to the bidirectional relationship between organizational confidence and performance, in line with Xu, Fernando, and Tam (2019). There is also the possibility of exploring the mediator effect of other elements, such as personality traits in the relationship between formal and informal controls and organizational commitment. Note that the study sample comprised only employees in a managerial position, as we assumed they knew the company's MCS, which encourages an investigation of the supporting employees' perception regarding management.

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Appendix A – Research Instrument

1. Formal Controls (Goebel & Weißenberger, 2017, p. 212)

Outcome Controls
Please indicate the extent to which the following statements apply to the establishment and assessment of your company's personnel performance goals.
Scale from 1 (Totally disagree) to 5 (Totally agree).
1. Specific performance goals are established for employees.
2. The achievement of employees' performance goals is controlled by their respective superiors.
3. Potential deviations from performance goals should be explained by the employees' supervisors.
4. The employees receive feedback from their supervisors regarding the extent to which they achieved their goals.
5. The components of variable remuneration are linked to the assigned performance goals.

Action Controls
Please indicate the extent to which the following statements apply to your company's policies and procedures manual.
Scale from 1 (Does not apply at all) to 5 (Applies completely).
6. Supervisors monitor the measures necessary for your employees to achieve performance goals.
7. Supervisors assess how the employees perform an assigned task.
8. Supervisors establish the work steps for routine tasks.
9. Supervisors provide information to employees regarding the most important tasks related to the achievement of performance goals.
10. Policies and procedures manuals establish the fundamental course of the processes.

2. Informal Controls (Goebel & Weißenberger, 2017, p. 212)

Personal Controls
Please indicate the extent to which the following statements apply to specific controls of selection and hiring of employees in your company.
Scale from 1 (Totally disagree) to 5 (Totally agree).
11. Our employees are carefully selected if they fit our organization's values and standards.
12. Much effort has been made to establish the most appropriate recruitment process for our organization.
13. Emphasis is placed on hiring the most suitable candidates for a specific job position.
14. Training and development activities for employees are considered very important.
15. Our employees are given numerous opportunities to expand their range of skills.

Cultural Controls

Please indicate the extent to which the following statements apply to standards, shared beliefs, and values in your company and which may influence your employees' behaviors.

Scale from 1 (Does not apply at all) to 5 (Applies completely).

16. Traditions, values, and standards play an important role in our organization.
17. Great emphasis is given to sharing informal conduct codes among employees.
18. Our mission statement conveys the organization's core values to our employees.
19. Top managers communicate the organization's core values to the employees.
20. Our employees are aware of the organization's core values.
21. Our employees perceive the values encoded in our mission statement as motivators.

3. Organizational Commitment (Goebel & Weißenberger, 2017, p. 213)

Please indicate the extent to which the following statements apply to the employees' commitment and identification with your company from an organizational perspective.

Scale from 1 (Totally disagree) to 5 (Totally agree).

22. Our employees are willing to make a great effort, beyond what is usually expected to contribute to our organization's success.
23. Our employees are very loyal to our organization.
24. There is a high level of congruence between our organization's values and our employees' values.
25. The direction of our organization is significant for our employees.
26. Our employees tell their friends that our organization is a good employer.

4. Organizational Confidence (Verburg *et al.*, 2018, p. 200)

Check your level of agreement with the statements below concerning the perception of your company's employees of whether the company is reliable in terms of its competence and goodwill.

Scale from 1 (Totally disagree) to 5 (Totally agree).

27. The company can fulfill its responsibilities.
28. The company is known to be successful in whatever it attempts to.
29. The company does things with competence
30. The company is concerned with the employees' well-being.
31. The employees' needs and desires are important for your company.
32. The company will do anything to help the employees.
33. The company would never deliberately take advantage of employees.
34. The company is guided by solid moral principles and codes of conduct.
35. Power is not abused in your company.
36. The company does not explore external stakeholders (suppliers, clients, others).