

ARTICLE

Do cultural controls influence affective commitment in a family firm? Effects of feedback/feedforward, work pressure, and counterproductive behaviors

Ilse Maria Beuren¹ 
Beatriz da Silva Pereira¹ 
Janete Pinto da Silva Martins¹ 

Abstract

Purpose – This study examines the influence of cultural controls on affective commitment in a family firm, mediated by feedback/feedforward, work pressure, and counterproductive behaviors.

Theoretical framework – Under the lens of social exchange theory, it is postulated that cultural controls have a direct effect on affective and indirect commitment through feedback/feedforward, work pressure and counterproductive behaviors.

Design/methodology/approach – The hypotheses were tested with data from a survey carried out with employees of a family firm, using structural equation modeling.

Findings – The research results show that there is a direct positive relationship between cultural controls and affective commitment. Cultural controls positively influence feedback/feedforward and work pressure, but no negative influence on counterproductive behaviors was observed. Also, positive influence of feedback/feedforward on affective commitment was found, but not work pressure, and not even negative influence of counterproductive behaviors.

Practical & social implications of research – The research findings contribute to the literature and managerial practice by revealing that cultural controls directly impact the affective commitment of employees and indirectly through the mediating effect of feedback/feedforward, work pressure, and counterproductive behaviors. This indicates that even after the IPO, cultural aspects continue to influence the behavior of the employees of the researched family firm.

Originality/value – The study is relevant in revealing, in the light of social exchange theory, the effects of cultural controls on the affective commitment of employees of the family firm, with the intervention of feedback/feedforward.

Keywords: Cultural controls, affective commitment, performance, family firm.

1. Universidade Federal de Santa Catarina, Departamento de Ciências Contábeis, Florianópolis, SC, Brasil

How to cite:

Beuren, I. M., Pereira, B. S., & Martins J. P. S. (2024). Do cultural controls influence affective commitment in a family firm? Effects of feedback/feedforward, work pressure, and counterproductive behaviors. *Revista Brasileira de Gestão de Negócios*, 26(2), e2023153. <https://doi.org/10.7819/rbgn.v26i02.4265>

Received on:

Aug/05/2023

Approved on:

July/04/2024

Responsible editor:

Profa. Dra. Gina Santos

Reviewers:

Carolina Machado;
Thiago Bruno de Jesus

Evaluation process:

Double Blind Review

This article is open data



Revista Brasileira de Gestão de Negócios

<https://doi.org/10.7819/rbgn.v26i02.4265>

I Introduction

Family businesses are guided by the purpose of the individuals who founded and/or run them, which consists of shaping and pursuing the vision of one or a few families that control the dominant coalition in the organization (Helsen et al., 2017; Lambrechts & Gnan, 2022). They are distinguished from non-family businesses by their distinct culture, organizational values, and relationships due to the overlap of family, ownership, and management (Helsen et al., 2017; Pagliarussi & Leme, 2020). A growing stream of research on family businesses can be observed in the literature, although their importance to the economy is not new (Frezatti et al., 2023; Helsen et al., 2017; LeCounte, 2022).

One of the perspectives of this stream is based on social exchange theory. One of the basic principles of this theory is that relationships evolve over time and that reciprocity is based on interdependent exchanges represented by give-and-take transactions, whether monetary or non-monetary (Birtch et al., 2016; Cropanzano & Mitchell, 2005). Social exchange theory has been used to examine the mechanisms underlying the impact of perceived organizational support on performance and job satisfaction (Sungu et al., 2019; Tian et al., 2014), and to understand how psychological contract adherence can improve the understanding of aspects of work that interact to influence outcomes (Azeem et al., 2020; Birtch et al., 2016). However, studies based on this theory in family firms are scarce (Lambrechts & Gnan, 2022).

Reciprocity, advocated in social exchange theory, can be considered as a cultural norm of individual orientation, so it influences people's behavior and those who follow it are obliged to behave reciprocally (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005). From this perspective, culture appears as a managerial control (Beuren & Vaz, 2021; Malmi & Brown, 2008) and one of its components is beliefs, which provide fundamental values, purpose, and direction for the organization (Simons, 1995). The culture of family businesses is unique (Almeida et al., 2021), as the beliefs and values of the owner family affect the organization (Udin et al., 2022). This suggests that the cultural controls in these firms are also unique, which calls for further research.

Cultural controls can affect organizational commitment (Cropanzano & Mitchell, 2005).

Commitment consists of a strong attachment to the beliefs, goals, and values of the organization and a desire to work hard to remain in it, which can affect performance (Mercurio, 2015; Pazetto et al., 2023). These characteristics underpin commitment in the taxonomy proposed by Meyer and Allen (1991) (affective, instrumental, and normative). This study focuses on affective commitment, which stems from the individual's evaluation of their working conditions and results in an affective state towards the organization (Luiz & Beuren, 2024). Although cultural controls appear as potential antecedents of affective commitment, the literature is silent on their effects.

Socio-emotional needs lead employees to evaluate how the organization rewards their efforts, thus forming general beliefs about how much it values their contributions and cares about their well-being, so that there is a personalization of the organization supported by its culture (Rhoades et al., 2001; Udin et al., 2022). Although social exchange relationships in organizational contexts mainly materialize in financial and non-financial rewards, the latter seem to have greater potential to promote pro-organizational behaviors, such as affective commitment (Cropanzano & Mitchell, 2005; Mercurio, 2015). This aspect calls for further research, especially in the context of family firms, where a culture of emotional ties persists.

There are still aspects to be clarified regarding the nuances underlying social exchange theory and its application in empirical research, which calls for new theoretical and empirical research (Cropanzano & Mitchell, 2005). The literature has not considered this theoretical lens when analyzing the psychological effects of control in general, and cultural controls in particular, on affective commitment (Mercurio, 2015; Udin et al., 2022) in family firms. Research has shown that this effect may not be direct; intervening factors may affect this relationship, such as feedback/feedforward (Beuren et al., 2022; Otley, 1999), work pressure (Cooper et al., 1988; Tian et al., 2014), and counterproductive behaviors (Bellora-Bienengraber et al., 2022; Gruys & Sackett, 2003).

Given the identified gaps, the following research question arises: What is the influence of cultural controls on affective commitment, mediated by feedback/feedforward, work pressure, and counterproductive behaviors? Thus, the aim of this study is to examine the influence of cultural controls on affective commitment in a family business,

mediated by feedback/feedforward, work pressure, and counterproductive behaviors. A single-entity survey was conducted in a large, fifty-year-old family business that went public in 2021, and structural equation modeling was used to analyze the data. The relevance of the study lies in the joint analysis of these constructs in a single model, which are found separately in the literature, in addition to the neglected locus, the family business.

This study contributes to the literature on family firms by responding to calls for research to help better understand them (Udin et al., 2022), including when they go public. This study posits that family firms differ from non-family firms, particularly in the management of human capital (Lambrechts & Gnan, 2022). It contributes to the stream of research that uses social exchange theory as a theoretical lens to understand employees' feelings of reciprocity with the organization in which they work (Cropanzano & Mitchell, 2005), by examining the effects of cultural controls (Udin et al., 2022) on the behavior of family business employees. In doing so, it advances research that has touched on this issue, such as that which examined the effect of the cultural system on the provision of information (García-Sánchez et al., 2013). It also adds to the literature by analyzing the intervention of organizational factors (feedback/feedforward and work pressure) and individual factors (counterproductive behaviors) in the relationship between cultural controls and affective commitment in a family business.

It also contributes to the management practices of family businesses. First, because in the transition phase, as a result of going public through an initial public offering (IPO), the organization's governance is permeated with remnants of a family business, while at the same time bearing characteristics of a public company, evidence of which denotes the persistence of these values and beliefs (Udin et al., 2022). It contributes by examining the effect of cultural controls (Malmi & Brown, 2008) on affective commitment in the context of this family business. Second, the conclusions of the study can be useful for understanding the social relations of the family business with its employees (Cropanzano & Mitchell, 2005), especially the psychological effects of cultural controls that precede affective commitment. Third, they can support the definition of the provision of feedback/feedforward (Beuren et al., 2022; Otley, 1999) and the level of work pressure in order to guide employees towards desired behavior and avoid counterproductive behaviors.

2 Theoretical framework and hypotheses

2.1 Cultural controls and affective commitment

The culture of family firms is characterized by socio-emotional wealth, as the management decisions (e.g. strategies, processes, and relationships) of family owners are guided by the preservation of affective endowments (Helsen et al., 2017). To characterize a firm as family owned, Astrachan et al. (2002) consider that three main elements can be used: (i) power, which includes governance, management, and family participation; (ii) experience, which refers to the number of family members and generations in the business; and (iii) culture, which includes the overlap between family values and business values and the family's commitment to the business.

The formation of cultural patterns in a family business is inherent to its constitution, and the founders play a central role in this process, such that their principles and trajectory will influence the worldview of the employees (Almeida et al., 2021; Schein, 1995). The spread of cultural patterns throughout the company and their assimilation by employees are supported by cultural controls (Beuren & Vaz, 2021; Malmi & Brown, 2008). Cultural controls, embodied in the organization's beliefs, values, and norms, are disseminated with the purpose of directing employees towards desired behaviors (Einhorn et al., 2021; Simons, 1995).

Employees who identify and get involved with the organization in which they work develop affective commitment (Luiz & Beuren, 2024; Mercurio, 2015). Affective commitment represents the employee's affective attachment to the organization, because by identifying with it, they end up getting involved with its goals (Meyer & Allen, 1991). This behavior can be developed in the individual through the predisposition of obligation towards the organization (Meyer & Allen, 1991; Sungu et al., 2019). It can result from certain norms internalized by the individual, such as beliefs in the organization's values and willingness to make efforts (Cropanzano et al., 2017; Mercurio, 2015; Meyer & Allen, 1991).

Evidence from empirical research shows that the family business requires a differentiated management process (Almeida et al., 2021) that takes into account behavioral issues, as it must deal with complex relationships, break parental relationships, and combine mutual interests

and benefits (business-family) (Einhorn et al., 2021). The role of cultural controls permeates this scenario and can promote affective commitment (Einhorn et al., 2021) in family businesses undergoing transformation (LeCounte, 2022; Pagliarussi & Leme, 2020). In light of this, it is proposed that:

H1: There is a positive influence of cultural controls on affective commitment.

2.2 Cultural controls and intervening performance factors

Organizations focus on controls to leverage their capabilities and performance, and the diversity of controls and their different purposes amplify their importance in organizational decision making and control (Malmi & Brown, 2008). Controls are used to achieve organizational goals and direct the behavior of individuals towards this purpose (Meutia & Bukhori, 2017). This process can direct cultural controls in line with organizational norms and values to guide employees (Malmi & Brown, 2008). For example, it can influence feedback and feedforward (Meutia & Bukhori, 2017) and work pressure (Tian et al., 2014), as well as leading to counterproductive work behaviors (Gruys & Sackett, 2003).

Feedback and feedforward are components of the management control system (Beuren & Gorla, 2016; Meutia & Bukhori, 2017). They serve as a source of learning and adaptation of employee behavior to the desired standards within the organization (Beuren & Gorla, 2016; Otley, 1999). However, Otley (1999) points to the difference between their information flows, with feedback consisting of a single cycle and feedforward of a double learning cycle. Therefore, the roles of both are different in management control, as feedback focuses on the evaluation of results, while feedforward focuses on their formulation and prediction (Beuren et al., 2022).

In an environment of transition in the governance of a family business, as in the case of an IPO, feedback and feedforward can be important tools for change and learning (Psychogios et al., 2019). These are elements of a management control system that are influenced by aspects of organizational culture (Frezatti et al., 2023) and which, in a family business, even give the controls peculiarities of the culture of its founders (Almeida et al., 2021).

These characteristics allow cultural controls to help the family business achieve higher levels of performance (Einhorn et al., 2021). It follows that cultural controls

in family firms are surrounded by the culture brought by the founder or founding family (Almeida et al., 2021; Frezatti et al., 2023), which affects the feedback and feedforward provided to employees (Udin et al., 2022). Thus, it is hypothesized that cultural controls contribute to promoting change and learning (Psychogios et al., 2019) in family businesses. Therefore, it is assumed that:

H2a: There is a positive influence of cultural controls on feedback/feedforward.

The literature establishes that the philosophies, policies, strategies, and structures proposed at the creation of an organization persist throughout its existence, even during periods of change (Helsen et al., 2017). This persistence is linked to the founder, who imbues the created organization with his or her values and interests, and these elements accompany it throughout its life cycle (Johnson, 2007). This suggests that these aspects of culture are maintained even when the organization goes public, at least initially, especially if elements that characterize a family business (e.g. power, experience, and culture) persist in the business (Astrachan et al., 2002).

The persistence of these characteristics in the organization (Johnson, 2007) does not inhibit unpredictability (Tian et al., 2014), in situations of going public to bring in new partners. A vicious cycle can set in, with a lack of identification generated by the perceived lack of reciprocity generated by insecurity (Tian et al., 2014), leading to unpredictability. Employees with negative feelings towards the organization may lose their emotional attachment, as this attachment depends on their identification (Tian et al., 2014), among other aspects that are detrimental to the organization.

From this perspective, an important stressor (Tian et al., 2014) responsible for generating emotional exhaustion is work pressure, which is the first stage of burnout syndrome (Cravens et al., 2004). Organizational values and principles of family businesses, as cultural controls, can act as a support for emotional maintenance, even in high-pressure environments, given their socio-emotional wealth and decisions guided by the preservation of affective endowments (Helsen et al., 2017). Therefore, it is assumed that:

H2b: There is a positive influence of cultural controls on work pressure.

The literature provides theoretical support that cultural controls influence job performance (Abdullahi et al., 2021; Grabner et al., 2022). Abdullahi et al. (2021)

found a positive and significant impact of organizational culture on employee performance. Grabner et al. (2022) confirmed that cultural control is an effective means of improving innovation task performance at different organizational levels.

These studies addressed contextual performance, while the literature provides evidence that it can be analyzed under three domains: task performance, contextual performance, and counterproductive work behavior (Gruys & Sackett, 2003). The latter refers to any intentional behavior on the part of an individual that is contrary to the interests of the organization (Bellora-Bienengräber et al., 2022). This domain requires special attention from organizations as they may suffer losses due to counterproductive employee behavior (Lawrence & Robinson, 2007).

The family business can generate counterproductive behavior because the beliefs and values of the company are unique and the behavior of the owning family (Udin et al., 2022) may not be seen as fair. Individuals are closely related, although they have different ways of interpreting reality and do not share the same interests, values, and assumptions (Danes et al., 1999), which may lead to the company's culture being viewed with suspicion (Tian et al., 2014). In light of this, it is predicted that:

H2c: There is a negative influence of cultural controls on counterproductive behavior.

2.3 Factors affecting performance and affective commitment

Affective commitment to the organization can be intensified by reward practices, job security, promotion opportunities, information sharing, and training (Luiz & Beuren, 2024). The literature provides evidence that various factors precede organizational commitment (Luiz & Beuren, 2024). Factors such as feedback/feedforward (Beuren et al., 2022) and work pressure (Lawrence & Robinson, 2007) can promote affective commitment (Pazetto et al., 2023), which contrasts with counterproductive behaviors (Bellora-Bienengräber et al., 2022).

Feedback and feedforward can serve as evaluation systems for the learning process (Mercurio, 2015). Feedback uses the analysis of experiences to determine the behavioral routines that employees should follow to ensure a higher level of knowledge (Beuren et al., 2022). Feedforward is used to promote dialogue and learning in order to achieve the organizational goals (Meutia & Bukhori, 2017).

Both are intertwined with affective commitment to the organization (Khandakar & Pangil, 2021).

Young et al. (2017) found evidence that negative feedback given in an empathetic manner contributes to identification with the organization. The sharing of information and knowledge among employees through organizational intervention can reduce costs, improve performance, and increase the quality of work and quality of life (Sitohang & Meilani, 2023). Associating feedback/feedforward with commitment seems inevitable, as the absence of it can cause damage to the organization, such as underperformance (Lawrence & Robinson, 2007). In light of the above, it is postulated that:

H3a: There is a positive influence of feedback/feedforward on affective commitment.

Work pressure is generally negatively associated with job performance and employee retention in the organization (Cravens et al., 2004; Tian et al., 2014). However, if employees see the organization's goals as their own and want to stay with the organization, they will do whatever it takes to stay, even if it means working long hours (Rhoades et al., 2001; Tian et al., 2014).

Employees may perceive that the organization is sacrificing resources for their learning and maintenance (Khandakar & Pangil, 2021), thus increasing their affective commitment to the organization. Previous studies (e.g. Rhoades et al., 2001; Tian et al., 2014) suggest that affective commitment is responsible for positive actions such as mutual help among employees, well-being, extending working hours to achieve goals, and sharing information.

Work pressure (Lawrence & Robinson, 2007) is thought to increase affective commitment when there are factors that interfere with organizational commitment, such as job security and opportunities for advancement (Tian et al., 2014). The literature provides evidence that several factors precede organizational commitment (Luiz & Beuren, 2024), which can lead to greater attachment and identification with the organization (Rhoades et al., 2001), such as increased working hours to achieve goals (Tian et al., 2014). Therefore, it is expected that:

H3b: There is a positive influence of work pressure on affective commitment.

Counterproductive behavior, which includes actions taken voluntarily by individuals that violate organizational interests (Gruys & Sackett, 2003), is directed at the organization, which is both the victim and the enforcer of the established relationship (Lawrence & Robinson,

2007). When employees perceive that the organization does not adhere to the established relationship, they feel more insecure, which reduces their effort and consequently worsens their job performance (Tian et al., 2014).

Counterproductive behaviors can stem from perceptions of unfair attitudes and procedures (Gruys & Sackett, 2003) and job insecurity because it violates the psychological contract between the organization and the employee (Tian et al., 2014), which reduces their well-being (Lawrence & Robinson, 2007). In a culture where employees feel that they are being constantly monitored, this can lead them to increase their counterproductive behavior rather than decrease it (Jensen et al., 2010).

Gill et al. (2011) found a negative relationship between affective commitment and counterproductive behavior. Tian et al. (2014) found a positive relationship between job insecurity and counterproductive behavior, and a negative relationship between insecurity and affective commitment. This suggests that affective commitment and counterproductive behavior go in opposite directions. Jensen et al. (2010) point out that when there is counterproductive behavior, instituting monitoring policies increases distrust in the company, which may be associated with a decrease in commitment. In light of the above, it is postulated that:

H3c: There is a negative influence of counterproductive behaviors on affective commitment.

2.4 Intervention of feedback/feedforward, work pressure, and counterproductive behaviors

Organizational culture, especially in family businesses, on the one hand can create a kind of managerial paternalism that leads to affective commitment and organizational identification (Mercurio, 2015), and on the other hand it requires the use of cultural controls to find a balance. Controls are used so that employees' behavior goes in the same direction as organizational goals (Merchant et al., 2003). In this study, cultural control is important because it expresses the culture of the organization and is reflected in the perceptions of employees (Rhoades et al., 2001).

It is possible that the relationship between cultural controls and affective commitment is not so direct, as other variables may interfere with the satisfaction of employees' socio-emotional needs, especially in family firms (Almeida et al., 2021). It is assumed that this link

can be obtained through employees' perceptions that the organization rewards them for their efforts, evaluates them to provide appropriate feedback and promote learning through feedforward (Beuren & Gorla, 2016; Otley, 1999), cares about their well-being even in the face of work pressures (Tian et al., 2014), and values them (Rhoades et al., 2001).

In doing so, the organization can avoid counterproductive behavior (Tian et al., 2014), including both organizational deviance, which refers to deviant behavior that directly harms the organization (Khattak et al., 2021), and interpersonal deviance, which refers to deviant behavior that harms another individual in the organization (Sarwar et al., 2020). It is hypothesized that feedback/feedforward (Beuren et al., 2022), work pressure (Tian et al., 2014), and counterproductive behaviors (Gruys & Sackett, 2003) can mediate the effect of cultural controls on affective commitment. Thus, it is proposed that:

H4: There is a mediating effect of feedback/feedforward, work pressure, and counterproductive behaviors on the relationship between cultural controls and affective commitment.

Figure 1 shows the theoretical model of the research and the hypotheses formulated based on the theoretical framework.

The theoretical research model also includes the following control variables: organizational (organizational values, team conflicts, and ethics and honesty) and individual (monotony/stress at work, separation of domestic and professional activities, work-life balance, and willingness to work).

3 Method

3.1 Single entity survey and respondents

A single entity survey was conducted in a family business founded in 1976. In the 1980s it underwent extensive expansion and in the 1990s it consolidated its position in the market. In February 2021 it went public and was listed on the *Brasil, Bolsa, Balcão* [B³] stock exchange. Despite a structure based on professional management, there are strong signs of the culture, vision, and values of the founding family. More than 20 years ago, it created a code of ethics and conduct to guide the actions of employees at all levels and to establish the

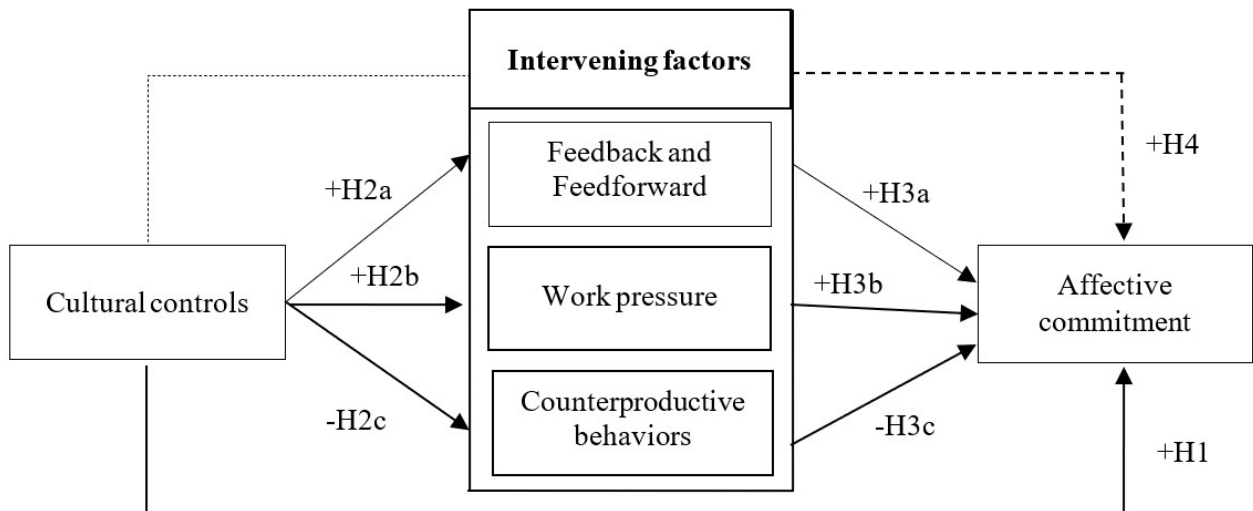


Figure 1. Theoretical research model.

Note: Dotted arrow indicates indirect relationship

Source: Own elaboration

rules of the organization’s relationship with competitors, customers, and suppliers. These factors (family business culture and established rules of engagement) were decisive in the selection of the company in terms of the theoretical research model, as well as access to the company.

Contact with the company began with the People Management Department, which was informed of the purpose, ethical aspects, and research instrument. After informal authorization from the management to carry out the research and the appointment of an employee to monitor operationalization in the company, information on the composition of the workforce was sought. The aim was to research areas of the company that were interdependent (interacting) and had a similar level of knowledge, in order to obtain a homogeneous sample. On the assumption that the management-fiscal sectors have this profile, similar structures, and are intertwined with strategies and decisions, it was decided to apply the questionnaire to employees in the financial, accounting, and legal sectors.

The company had a total of approximately 5,000 employees, of which 191 worked in these sectors at the time of the survey. The questionnaire was sent to these employees via the QuestionPro platform. There were 109 valid responses, representing 57% of the potential respondents (Supplementary Data 1 - Database A and Supplementary Data 1 - Database B). This sample meets the G*Power minimum of 85 responses, considering an

average effect of 0.15, a significance level of $\alpha=0.05$ and sample power of $1-\beta=0.80$ (Faul et al., 2009).

3.2 Constructs and research instrument

In order to mitigate common method bias (CMB), the following recommendations from Podsakoff et al. (2003) were followed: (i) a variety of scales were used for the questions in the survey instrument; (ii) the respondents were informed that there were no right or wrong answers and that the answers were reliable within the context of the organization in which they work; (iii) the respondents were anonymous, which ensured confidentiality of the information and consolidated analyses of the data.

The variables were evaluated for CMB using Harman’s single factor test (Podsakoff et al., 2003). The results showed that a single factor accounted for 44.89%, so no extracted factor explained more than 50% of the total variance, suggesting that CMB is not a problem in the model. Table 1 shows the research instrument with the constructs, statements, and scale.

Exploratory factor analysis (EFA) was carried out to validate the variables, using the Kaiser-Meyer-Olkin (KMO) criterion and Bartlett’s sphericity test. The KMO index, also known as the sampling adequacy index, indicates how appropriate the application of EFA is to the data set, which can vary from 0 to 1 (Hair et al., 2017). The value found was 0.853, which is considered optimal. In Bartlett’s test sphericity, which indicates whether there

Table 1
Constructs and research instrument

Cultural controls	
Do you identify with the company's vision for the future?	0= No, I think it's utopian; 10= Yes, and I work hard to achieve it.
How much do the company's employees identify with the company's values?	0= They don't identify with them; 10= They identify with them completely.
Do you feel that your sector's mission makes sense to your coworkers?	0= No, they don't know the company's mission; 10= Yes, it's what motivates everyone.
Affective commitment	
How much do you recommend your company's products and services?	0= I don't recommend them; 10= I highly recommend them.
How likely are you to recommend this company as a place to work?	0= I don't recommend it; 10= I highly recommend it.
Looking at my work team, I can say that:	0= We're a group of people from the same area; 10= We're a real team.
Feedback	
How often do you receive information about your job performance?	0= I can't remember the last time; 10= I receive information all the time.
In general, do you receive useful feedback on your job performance?	0= Not at all, the feedback is always vague; 10= Yes, most of the time it's very useful for my development.
Feedforward	
How committed are you to managing and developing your career?	0= I'm not too worried about it; 10= I'm extremely committed.
Does the company encourage you to explore new ideas?	0= Definitely not; 10= Yes, I have all the support I need to develop new ideas.
Are there opportunities to learn new things in your current role?	0= No, it's always the same; 10= Of course, here we can always experiment and learn.
Do the leaders in your sector have a clear vision of where they're going and how to get there?	0= They have no idea; 10= Yes, that's well defined.
Counterproductive behavior	
How would you rate the level of discrimination in your sector?	0= There are various forms of discrimination; 10= We're treated the same here.
I feel that the people in this company:	0= Don't care about anyone; 10= Look after each other.
Work pressure	
How stimulated are you to seek growth in the company?	0= I don't feel stimulated; 10= Very stimulated.
Is there a balance between your sector's objectives and your own?	0= There's no balance, I don't perceive actions directed towards the employees' objectives; 10= There's balance, it's possible to perceive that both objectives are taken into account.
Do you get help from your direct manager to achieve your results?	0= No. I have to manage on my own; 10= Yes, their guidance makes all the difference.

Source: Elaboration based on theoretical and empirical references.

is a sufficient relationship between the variables to apply EFA, it is recommended that the p-value be less than 0.05 (Hair et al., 2017). The sample showed a sphericity value of 0, so the data fit.

Table 2 shows the questions in the survey instrument related to the organizational and individual control variables.

The individual control variables, all on a scale from 1 to 4, with only the inversion of the first question, followed the logic of the organizational control variables, where the first is the most negative option and the fourth is the most positive option in the theoretical model. When analyzing each of the variables in isolation, the values were

maintained. The organizational control variables were removed from the structural model due to the high concentration of responses with one or more positive items. The descriptive analysis of the organizational information was as follows:

1. Does your company have defined core values? R1: Yes, but not everyone knows these values (49); and R2: Yes, and they really fit our company (60).
2. When conflicts occur in the work team. R1: Cliques form (17); R2: Nobody talks about it (8); R3: We ask the immediate leadership for help and they decide (15); and R4: We resolve it together in a productive way (69).

Table 2
Control variables - survey instrument

Organizational control variables	
Does your company have defined core values?	1. No, and I don't think it's important; 2. Not yet; 3. Yes, but not everyone knows these values; 4. Yes, and they really fit our company.
When conflicts occur in the work team:	1. Cliques form; 2. No one talks about it; 3. We ask the immediate leadership for help and they decide; 4. We resolve it together in a productive way.
How much is the behavior of your immediate leaders based on ethics and honesty?	0= It's totally contrary to these principles; 10= Their behavior is based on these principles.
Individual control variables	
I consider my work:	1. Very calm, sometimes too much; 2. Balanced with some moments of stress; 3. Stressful pressure almost every day; 4. Crazy, I'm stressed all the time.
Do you usually carry out company activities outside of work hours?	1. Yes, all the time; 2. Almost all the time; 3. Hardly ever, only in emergencies; 4. Never, I don't have the ability.
My family and friends often say that:	1. I'm a workaholic; 2. I work too much, I should have more leisure; 3. They usually don't say anything; 4. I manage to balance work and personal life.
When I wake up in the morning...	1. I feel tired and sleepy; 2. I feel lazy and think I haven't had enough sleep; 3. I feel lazy, but then I wake up; 4. I feel ready for the day.

Source: Elaboration based on theoretical and empirical references.

3. How much is the behavior of your immediate leadership based on ethics and honesty? R1: It's totally contrary to these principles (3); and R2: Their behavior is based on these principles (106).

Before applying the survey instrument in the defined field, two researchers in the area analyzed each question and assessed its relevance to the respective construct. Subsequently, two professionals who were not part of the group of respondents were asked to evaluate the questionnaire in terms of how difficult it was to understand each question, and both felt that few adjustments were necessary, pointing out only a few semantic issues.

3.3 Data analysis procedures

Three tools from the SmartPLS4 software were used for partial least squares structural equation modeling (PLS-SEM): (i) the PLS algorithm to estimate the path coefficients; (ii) bootstrapping to assess the statistical significance of the paths; and (iii) blindfolding, which provides the indicator of model fit through predictive relevance (Q^2) (Hair et al., 2017).

The common method bias (CMB) test was also applied, which is characteristic of cross-sectional studies in which responses are collected at the same time and from the same source (Podsakoff et al., 2003).

In order to check for possible response bias, the t-test was applied as a way of comparing the responses to the statements in the study from the first 10% of respondents with the last 10%, considering a 5% significance level (Podsakoff et al., 2003). It was found that there were no significant differences, indicating that there was no non-response bias in the data.

4 Results

The survey respondents work in the financial, legal, or accounting areas of the company surveyed. The demographic profile of the 109 respondents is shown in Table 3.

There was a gender balance and a predominance of young people, with the majority of respondents under the age of 35. In terms of academic qualifications, there was a predominance of degrees in Accounting and Business Administration. In terms of functions, analyst and financial analyst stood out among the respondents' positions/functions.

4.1 Measurement model

In the structural equation modeling, the first step was to analyze the measurement model and make any necessary adjustments (Hair et al., 2017). Since the

Table 3
Demographic data

Gender			Age		
	Quant.	%		Quant.	%
Female	55	50	18 to 24 years	27	25
Male	54	50	25 to 35 years	65	60
			36 to 45 years	15	14
			46 to 55 years	2	2
Total	109	100	Total	109	100
Academic background			Positions/Functions		
	Quant.	%		Quant.	%
Accounting	45	41	Analyst	28	26
Business Administration	38	35	Financial analyst	30	28
Law	5	5	Cost and budget analyst	9	8
Economics	2	2	Tax analyst	6	6
Production Engineering	1	1	Fiscal analyst	5	5
Exact Sciences	1	1	Accounting analyst	4	4
Applied Social Sciences	1	1	Foreign exchange analyst	1	1
Technologist in Management Processes	1	1	Legal analyst	3	3
Completed high school	15	14	Legal assistant	2	2
			Lawyer	1	1
			Supervisor	8	7
			Financial manager	1	1
Total	109	100	Total	109	100

Source: Survey data.

factor loading was less than 0.40, the item “how committed are you to managing and developing your career” was excluded from the feedforward construct, which resulted in an increase in the average variance extracted (AVE) and composite reliability (CR) (Hair et al., 2017). Analyses were conducted with first and second order elements, and no significant changes were found.

The four individual control variables were also tested. First, each of the variables was tested, then the four variables were tested together, but in none of the tests was there a variation greater than 0.001. Next, the measurement model was examined, which analyzes the criteria of validity (convergent and discriminant) and reliability (internal and external), in order to certify the measurement of the constructs (Hair et al., 2017). The results are presented in Table 4.

The Cronbach’s alpha values are greater than 0.70, which attests to the reliability of the model and ensures that the responses are free of bias (Hair et al., 2017). Among the constructs, feedforward had the highest Cronbach’s alpha (0.900), followed by feedback (0.819). Although affective commitment and counterproductive controls were below the satisfactory value, both were maintained as they were above 0.60. Possible reasons for these values are the sample size and the number of variables (Hair et al., 2017).

Convergent validity represents the extent to which the variance of each construct’s indicators is shared with the others (Hair et al., 2017). These are obtained through the AVE and are acceptable if they are equal to or greater than 0.5 (Hair et al., 2017), which confirms the validity of the constructs as all items showed values above this minimum. Discriminant validity checks how different one construct is from the others (Hair et al., 2017), in two ways: through the Fornell-Larcker matrix test and the cross-loadings matrix. To meet the Fornell-Larcker criterion, the square root of the AVE of each construct must be greater than its highest correlation with another construct, and the factors of each construct must be greater than the previous ones when the matrix is checked horizontally (Hair et al., 2017). The reliability of the constructs is confirmed as all values are adequate.

Affective commitment had the highest mean, confirming previous studies that have shown high levels of employee commitment when there is a high level of social exchange with the organization. Even the item with the lowest mean, feedback, has a high value, confirming the findings in the literature that employees value analysis of their actions and guidance for growth. Overall, the descriptive analysis shows that the respondents signal agreement on the variables studied, both those of cultural

Table 4
Measurement model

Construct	Mean	SD	α	CR	Adj. R2	AVE	Fornell-Larcker \ HTMT					
							1	2	3	4	5	6
1. AC	9.07	1.27	0.679	0.824	0.663	0.609	0.780	1.024	1.082	0.981	1.010	0.970
2. CC	8.82	1.28	0.765	0.866	-	0.684	0.747	0.827	0.953	0.878	0.935	0.979
3. CPB	8.74	1.45	0.649	0.851	0.638	0.740	0.714	0.677	0.860	0.908	1.045	0.904
4. FDK	8.23	1.83	0.819	0.877	0.920	0.597	0.738	0.700	0.673	0.773	1.112	1.026
5. FFW	9.01	1.32	0.900	0.920	0.595	0.541	0.789	0.774	0.801	0.959	0.736	1.106
6. WPR	8.62	1.54	0.757	0.860	0.853	0.673	0.700	0.732	0.633	0.837	0.924	0.820

Note 1: Values in bold represent the square root of the AVE, and the left/lower diagonal shows the correlation values, while the upper/right diagonal shows the HTMT values; **Note 2:** AC = Affective Commitment; CC = Cultural Controls; CPB = Counterproductive Behaviors; FDK = Feedback; FFW = Feedforward; WPR = Work Pressure. Source: Research data; SD = Standard Deviation; α = Cronbach's Alpha; CR = Composite Reliability; Adj. R2 = Adjusted R-Squared; AVE = Average Variance Extracted.

controls and those of intervening factors and affective commitment.

4.2 Structural model

In the structural model showing the path coefficients, the bootstrapping technique was used to test the hypotheses (Hair et al., 2017). The parameters used were 5,000 subsamples and 5,000 interactions, a bias-corrected and accelerated confidence interval, and a two-tailed test at a 5% significance level (Hair et al., 2017). Direct relationships between the variables were analyzed, followed by mediation.

The evaluation of the structural model begins with the layout of the path analysis, with the specified relationship, standard deviation (STDEV), t-value, p-value, and decision for each hypothesis. Second order factorial analysis was used to analyze the elements. Pearson's coefficient of determination (R^2) and predictive relevance using the Stone-Geisser indicator (Q^2) were applied to ensure the validation and accuracy of the path model (Hair et al., 2017). The results are shown in Table 5.

The result of H1 confirms a direct positive relationship between cultural controls and affective commitment (STDEV = 0.122, $p < 0.01$). This indicates that the organization's norms and values have an impact on employees' affective commitment to the organization. Hypotheses H2a (STDEV = 0.050, $p < 0.01$) and H2b (STDEV = 0.055, $p < 0.01$) were also not rejected, i.e. cultural controls have a positive impact on feedback/feedforward and work pressure. H2c (STDEV = 0.056, $p < 0.01$), which establishes a negative relationship between cultural controls and counterproductive behaviors, was rejected because, although significant, the

relationship is inverse and was expected to be negative. H3a (STDEV = 0.140, $p < 0.05$) was not rejected given the positive relationship between feedback/feedforward and affective commitment at the 5% significance level. In contrast, H3b (STDEV = 0.167, $p > 0.1$) was not significant and H3c (STDEV = 0.124, $p < 0.05$), although significant, had the opposite sign to that expected, so both were rejected. H4 (STDEV = 0.122, $p < 0.01$), which predicted a measurement effect of the intervening factors in the relationship between cultural controls and affective commitment, was not rejected.

4.3 Discussion of the results

The discussion of the results was guided by the analysis of the hypotheses. H1, which predicted a direct positive influence of cultural controls on affective commitment, was statistically supported enough to not be rejected. This result is consistent with the findings of previous research that pointed to the beliefs, vision, and values of the management family as predictors of employee behavior (Almeida et al., 2021; Mercurio, 2015). The non-rejection of the hypothesis allows us to conclude that there is identification and internalization of organizational cultural norms (Meyer & Allen, 1991), which is reflected in the satisfaction of belonging to the organization (Luiz & Beuren, 2024). It can also be seen that the culture is long-lasting (Simons, 1995), as it remains influential even after the company has been professionalized by going public. Despite going public, the company under study still has founders in its governance, which is assumed to imply the maintenance of consolidated principles.

Hypotheses H2a and H2b, which postulated that there is a positive influence of cultural controls on

Table 5
Structural Model

	Hypotheses	STDEV	T statistic	P value	Decision
H1 (+)	CC → AC	0.122	3.341	0.001***	Not rejected
H2a (+)	CC → FDK	0.050	14.851	0.000***	Not rejected
H2b (+)	CC → WPR	0.055	13.007	0.000***	Not rejected
H2c (-)	CC → CPB	0.056	11.157	0.000***	Rejected
H3a (+)	FDKW → AC	0.140	2.048	0.041**	Not rejected
H3b (+)	WPR → AC	0.167	0.284	0.776	Rejected
H3c (-)	CPB → AC	0.124	2.271	0.023**	Rejected
H4 (+)	CC → IF → AC	0.122	3.341	0.001***	Not rejected

Note 1: n = 109. Significant at *p<0.10; **p<0.05; ***p<0.01; **Note 2:** CC = Cultural Controls; AC = Affective Commitment; FDK = Feedback; FDKW = Feedback and Feedforward; WPR = Work Pressure; CPB = Counterproductive Behaviors; IF = Intervening Factors.

feedback/feedforward and work pressure, also show support for not rejecting them. These results confirm that cultural controls, which include organizational norms and values, influence the employees' expected behavior and performance evaluations (Tian et al., 2014). Thus, setting a desired standard, a goal to be achieved (Rhoades et al., 2001), leads employees to feel motivated and cope with stressors that may be caused by the opening of the IPO, such as work pressure, depending on the level of identification and social exchange with the organization. The positive interactions between the parties generate the need for employees to repay the company for the environment it provides, a reciprocity (Cropanzano & Mitchell, 2005).

H2c, which predicted a negative influence of cultural controls on counterproductive behaviors, was rejected because it did not show statistical support, even with an inverse relationship to what was expected. Previous studies have shown that counterproductive behaviors have more than one origin, so the effects on people can be differentiated. These include organizational constraints, which include collective aspects, and interpersonal conflicts, which include individual aspects, and these conflicts cause negative emotions (Bellora-Bienengräber et al., 2022). The collective culture may have influenced the result, as it is a company that is recognized and awarded for quality. An exchange relationship in which employees can perceive support and fairness can generate the internalization of organizational principles (Tang et al., 2017). In addition, changes with the arrival of new partners and a new structure may increase the sense of attachment to the culture built by the family.

H3a, which established the positive influence of feedback/feedforward on affective commitment, was supported and not rejected. This result is consistent with

previous studies on the effects on affective commitment (Rhoades et al., 2001; Tian et al., 2014). It has been argued that practices that encourage professional growth related to financial and non-financial rewards, which aim to motivate people and make them feel valued in the organization, make it possible to increase affective commitment (Khandakar & Pangil, 2021; Mercurio, 2015).

H3b, which assumed a positive influence of work pressure on affective commitment, was not significant, which led to its rejection. One possible explanation for this result is that work pressure is not capable of influencing affective commitment, which requires further research. It is also possible that statements in the survey instrument did not convey the message of work pressure, for example: "How stimulated are you to seek growth in the company?" "I don't feel stimulated," and "Is there a balance between your sector's objectives and your own?" "There's no balance, I don't perceive actions directed towards the employees' objectives." In addition, the representativeness of the company may be a factor, as employees may feel that they receive less than they deserve, thus reducing the sense of reciprocity.

H3c, which predicted the negative influence of counterproductive behaviors on affective commitment, despite its significance, indicated an inverse relationship, leading to its rejection. These behaviors are more related to individual than organizational aspects, which have a negative influence on affective commitment due to a lack of identification and mistrust in the organization's actions and decisions (Tian et al., 2014). In the survey, counterproductive behaviors were measured by the respondent's perception, which may have influenced the result. In addition, statements in the survey instrument may not have measured their subjectivity, such as regarding the degree of discrimination in their sector, "there

are various forms of discrimination,” and feeling that the people in the company “don’t care about anyone.” The IPO may have made employees feel that the company was no longer the same, and the commitment may have remained in the memory because of the strong emotional attachment to the old version.

H4, which postulated the mediating effect of feedback/feedforward, work pressure, and counterproductive behaviors on the relationship between cultural controls and affective commitment, found statistical support for not being rejected. Therefore, the research results showed that the effects of cultural controls on affective commitment are both direct and indirect. These findings corroborate the literature in that if the organization values employees, invests in their growth, well-being and retention, and their efforts are seen and rewarded, these actions have the effect of their affective commitment to the organization (Rhoades et al., 2001) in terms of reciprocity.

5 Conclusions, implications, and limitations

The results show that there is a direct positive relationship between cultural controls and affective commitment. Cultural controls also have a positive influence on feedback/feedforward and work pressure, but no negative influence on counterproductive behavior was observed. There was also a positive influence of feedback/feedforward on affective commitment, but not of work pressure, nor even a negative influence of counterproductive behaviors. It is clear that cultural controls continue to exert an influence on affective commitment, both directly and through intervening organizational and individual factors, even with the organization’s recent IPO. Despite professional management in accordance with the rules of the IPO, the cultural aspects inherent in its creation, stemming from the mission, vision, and values of the founding family, continue to influence the organization’s paths.

This study examines relationships that have been studied in the management literature, but not together as proposed in the theoretical model. In this way, the study contributes to expanding the research on family firms and their particularities and differences, especially with regard to the treatment of employees (Lambrechts & Gnan, 2022). In addition, it contributes to expanding the research stream that uses social exchange theory under the organizational theoretical lens by demonstrating the positive effects of cultural controls on employees’

affective commitment to the organization (Cropanzano & Mitchell, 2005; Udin et al., 2022). It also contributes by pointing out the intervention of organizational and individual factors (counterproductive behaviors) in the relationship between cultural controls and employees’ affective commitment in a family business, even after going public through an IPO.

The results also have practical implications for the organization under study. It can be concluded that the company’s culture, a unique aspect based on the founder’s values, beliefs, and vision, has an impact on the level of employee commitment, both directly and through intervening factors. This aspect can be considered by managers to enhance the positive effects of feedback/feedforward and work pressure on this relationship. In turn, the absence of negative effects of counterproductive behavior in this relationship may be a characteristic of this family business that calls for further investigation. Finally, the existence of remnants of the family business (Udin et al., 2022), even with the IPO carried out in 2021, can be exploited as an attraction for different stakeholders, especially for qualified professionals in terms of organizational climate. These findings can be exploited by managers in order to boost employees’ positive feelings towards the organization, thereby increasing performance and competitiveness.

The limitations of the research permeate the interpretation of the results. Although the literature supports the constructs of the study, other variables could be considered in the proposed model and thus bring different contributions to the management literature. Future studies could analyze the negative impact of work pressure on affective commitment and cultural controls, as well as including new elements of organizational commitment and making comparisons. Work pressure could be analyzed in light of conflict theory and provide new insights. Other methods such as case studies, longitudinal studies, or experiments could be used in future research with a similar purpose. Finally, the theoretical and methodological choices allow us to recommend that other organizations be studied to see if the proposed relationships are confirmed, in addition to the application of other statistical techniques.

Acknowledgements

We are grateful to the anonymous reviewers for their constructive comments and guidance. This work was supported by the National Council for Scientific and Technological Development (*Conselho Nacional*

de Desenvolvimento Científico e Tecnológico - CNPq), the Programa FAPESC de Fomento à Pós-graduação em Instituições de Educação Superior do Estado de Santa Catarina, and the UNIEDU/FUNDES Program of the State of Santa Catarina (Programa UNIEDU do Estado de Santa Catarina), Brazil.

References

Abdullahi, M., Raman, K., & Solarin, S. (2021). Effect of organizational culture on employee performance: A mediating role of employee engagement in Malaysia educational sector. *International Journal of Supply and Operations Management*, 8(3), 232-246. .

Almeida, D. M., Beuren, I. M., & Monteiro, J. J. (2021). Reflexes of organizational values on the reward system in a family business. *Brazilian Business Review*, 18(2), 140-159. <http://doi.org/10.15728/bbr.2021.18.2.2>.

Astrachan, J. H., Klein, S. B., & Smyrnios, K. X. (2002). The F-PEC scale of family influence: A proposal for solving the family business definition problem. *Family Business Review*, 15(1), 45-58. <http://doi.org/10.1111/j.1741-6248.2002.00045.x>.

Azeem, M. U., Bajwa, S. U., Shahzad, K., & Aslam, H. (2020). Psychological contract violation and turnover intention: The role of job dissatisfaction and work disengagement. *Employee Relations*, 42(6), 1291-1308. <http://doi.org/10.1108/ER-09-2019-0372>.

Bellora-Bienengräber, L., Radtke, R. R., & Widener, S. K. (2022). Counterproductive work behaviors and work climate: The role of an ethically focused management control system and peers' self-focused behavior. *Accounting, Organizations and Society*, 96, 101275. <http://doi.org/10.1016/j.aos.2021.101275>.

Beuren, I. M., & Gorla, M. C. (2016). Factors that influence the behavior of the search for feedback of branches managers from the company manager. *Espacios*, 37(2). <https://www.revistaespacios.com/a16v37n02/16370201.html>

Beuren, I. M., Santos, V., & Bernd, D. C. (2022). Effects of using the management control system on individual performance with the intervenience of feedforward and organizational learning. *Journal of Knowledge Management*, 26(4), 1042-1060. <http://doi.org/10.1108/JKM-01-2021-0055>.

Beuren, I. M., & Vaz, P. V. C. (2021). Effects of the environmental strategy and management control system package on managerial performance. *Journal of Environmental Accounting and Management*, 9(4), 429-443. <http://doi.org/10.5890/JEAM.2021.12.007>.

Birtch, T. A., Chiang, F. F., & Van Esch, E. (2016). A social exchange theory framework for understanding the job characteristics–job outcomes relationship: The mediating role of psychological contract fulfillment. *International Journal of Human Resource Management*, 27(11), 1217-1236. <http://doi.org/10.1080/09585192.2015.1069752>.

Cooper, C. L., Sloan, S. J., & Williams, S. (1988). *Occupational stress indicator management guide* (102 p.). Windsor: Nfer-Nelson.

Cravens, D. W., Lassk, F. G., Low, G. S., Marshall, G. W., & Moncrief, W. C. (2004). Formal and informal management control combinations in sales organizations: The impact on salesperson consequences. *Journal of Business Research*, 57(3), 241-248. [http://doi.org/10.1016/S0148-2963\(02\)00322-3](http://doi.org/10.1016/S0148-2963(02)00322-3).

Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *The Academy of Management Annals*, 11(1), 479-516. <http://doi.org/10.5465/annals.2015.0099>.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900. <http://doi.org/10.1177/0149206305279602>.

Danes, S. M., Zuiker, V., Kean, R., & Arbuthnot, J. (1999). Predictors of family business tensions and goal achievement. *Family Business Review*, 12(3), 241-252. <http://doi.org/10.1111/j.1741-6248.1999.00241.x>.

Einhorn, S., Heinicke, X., & Guenther, T. W. (2021). Management control packages in family businesses: A configurational approach. *Journal of Business Economics*, 91(4), 433-478. <http://doi.org/10.1007/s11573-020-01008-7>.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149-1160. <http://doi.org/10.3758/BRM.41.4.1149>. PMID:19897823.

- Frezatti, F., Bido, D. S., Mucci, D. M., Beck, F., & Cruz, A. P. C. (2023). The impact of the management control system on the family business' Intention to maintain the organization for future generations. *Journal of the Knowledge Economy*, 14(3), 1145-1176. <http://doi.org/10.1007/s13132-022-00918-x>.
- García-Sánchez, I. M., Rodríguez-Ariza, L., & Frías-Aceituno, J. V. (2013). The cultural system and integrated reporting. *International Business Review*, 22(5), 828-838. <http://doi.org/10.1016/j.ibusrev.2013.01.007>.
- Gill, H., Meyer, J. P., Lee, K., Shin, K. H., & Yoon, C. Y. (2011). Affective and continuance commitment and their relations with deviant workplace behaviors in Korea. *Asia Pacific Journal of Management*, 28(3), 595-607. <http://doi.org/10.1007/s10490-009-9165-0>.
- Grabner, I., Klein, A., & Speckbacher, G. (2022). Managing the trade-off between autonomy and task interdependence in creative teams: The role of organizational-level cultural control. *Accounting, Organizations and Society*, 101, 101347. <http://doi.org/10.1016/j.aos.2022.101347>.
- Gruys, M. L., & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment*, 11(1), 30-42. <http://doi.org/10.1111/1468-2389.00224>.
- Hair Jr., J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Los Angeles: Sage.
- Helsen, Z., Lybaert, N., Steijvers, T., Orens, R., & Dekker, J. (2017). Management control systems in family firms: A review of the literature and directions for the future. *Journal of Economic Surveys*, 31(2), 410-435. <http://doi.org/10.1111/joes.12154>.
- Jensen, J. M., Opland, R. A., & Ryan, A. M. (2010). Psychological contracts and counterproductive work behaviors: Employee responses to transactional and relational breach. *Journal of Business and Psychology*, 25(4), 555-568. <http://doi.org/10.1007/s10869-009-9148-7>.
- Johnson, V. (2007). What is organizational imprinting? Cultural entrepreneurship in the founding of the Paris Opera. *American Journal of Sociology*, 113(1), 97-127. <http://doi.org/10.1086/517899>.
- Khattak, M. N., Zolin, R., & Muhammad, N. (2021). The combined effect of perceived organizational injustice and perceived politics on deviant behaviors. *International Journal of Conflict Management*, 32(1), 62-87. <http://doi.org/10.1108/IJCMA-12-2019-0220>.
- Khandakar, M. S. A., & Pangil, F. (2021). The role of affective commitment on the relationship between human resource management practices and informal workplace learning. *Higher Education, Skills and Work-Based Learning*, 11(2), 487-507. <http://doi.org/10.1108/HESWBL-01-2020-0004>.
- Lambrechts, F., & Gnan, L. (2022). Human resources and mutual gains in family firms: New developments and possibilities on the horizon. *Journal of Family Business Strategy*, 13(2), 100502. <http://doi.org/10.1016/j.jfbs.2022.100502>.
- Lawrence, T. B., & Robinson, S. L. (2007). Ain't misbehavin': Workplace deviance as organizational resistance. *Journal of Management*, 33(3), 378-394. <http://doi.org/10.1177/0149206307300816>.
- LeCounte, J. F. (2022). Founder-CEOs: Succession planning for the success, growth, and legacy of family firms. *Journal of Small Business Management*, 60(3), 616-633. <http://doi.org/10.1080/00472778.2020.1725814>.
- Luiz, T. T., & Beuren, I. M. (2024). Influence of the performance measurement system on job satisfaction and organizational commitment. *Revista de Administração Mackenzie*, 25(1), eRAMG240205. <http://doi.org/10.1590/1678-6971/eramg240205.en>.
- Malmi, T., & Brown, D. A. (2008). Management control systems as a package: Opportunities, challenges and research directions. *Management Accounting Research*, 19(4), 287-300. <http://doi.org/10.1016/j.mar.2008.09.003>.
- Merchant, K. A., Van der Stede, W. A., & Zheng, L. (2003). Disciplinary constraints on the advancement of knowledge: The case of organizational incentive systems. *Accounting, Organizations and Society*, 28(2-3), 251-286. [http://doi.org/10.1016/S0361-3682\(01\)00051-4](http://doi.org/10.1016/S0361-3682(01)00051-4).
- Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment: An integrative

literature review. *Human Resource Development Review*, 14(4), 389-414. <http://doi.org/10.1177/1534484315603612>.

Meutia, T. I., & Bukhori, A. (2017). The role of feedback and feed forward control system to improve competitive advantage of SMEs in Indonesia. *European Research Studies*, 20(2), 496-506. <http://doi.org/10.35808/ersj/655>.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89. [http://doi.org/10.1016/1053-4822\(91\)90011-Z](http://doi.org/10.1016/1053-4822(91)90011-Z).

Otley, D. (1999). Performance management: A framework for management control systems research. *Management Accounting Research*, 10(4), 363-382. <http://doi.org/10.1006/mare.1999.0115>.

Pagliarussi, M. S., & Leme, M. A. (2020). The institutionalization of management control systems in a family firm. *Qualitative Research in Accounting & Management*, 17(4), 649-673. <http://doi.org/10.1108/QRAM-12-2019-0128>.

Pazetto, C. F., Luiz, T. T., & Beuren, I. M. (2023). Empowering leadership for contextual performance: Serial mediation of organizational support and commitment. *International Journal of Productivity and Performance Management*. In press.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879-903. <http://doi.org/10.1037/0021-9010.88.5.879>. PMID:14516251.

Psychogios, A., Blakcori, F., Szamosi, L., & O'Regan, N. (2019). From feeding-back to feeding-forward: Managerial feedback as a trigger of change in SMEs. *Journal of Small Business and Enterprise Development*, 26(1), 18-42. <http://doi.org/10.1108/JSBED-01-2018-0034>.

Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *The Journal of Applied Psychology*, 86(5), 825-836. <http://doi.org/10.1037/0021-9010.86.5.825>. PMID:11596800.

Sarwar, A., Naseer, S., & Zhong, J. Y. (2020). Effects of bullying on job insecurity and deviant behaviors in

nurses: Roles of resilience and support. *Journal of Nursing Management*, 28(2), 267-276. <http://doi.org/10.1111/jonm.12917>. PMID:31788904.

Schein, E. H. (1995). The role of the founder in creating organizational culture. *Family Business Review*, 8(3), 221-238. <http://doi.org/10.1111/j.1741-6248.1995.00221.x>.

Simons, R. (1995). *Levers of control*. Boston: Harvard Business School Press.

Sitohang, S. A. M., & Meilani, Y. C. P. (2023). The effect of quality of work life and job satisfaction on performance mediated knowledge sharing by msme employees. *Feedforward: Journal of Human Resource*, 3(2), 56-62. <http://doi.org/10.19166/ff.v3i2.7425>.

Sungu, L. J., Weng, Q., & Kitule, J. A. (2019). When organizational support yields both performance and satisfaction: The role of performance ability in the lens of social exchange theory. *Personnel Review*, 48(6), 1410-1428. <http://doi.org/10.1108/PR-10-2018-0402>.

Tang, G., Yu, B., Cooke, F. L., & Chen, Y. (2017). High-performance work system and employee creativity: The roles of perceived organisational support and devolved management. *Personnel Review*, 46(7), 1318-1334. <http://doi.org/10.1108/PR-09-2016-0235>.

Tian, Q., Zhang, L., & Zou, W. (2014). Job insecurity and counterproductive behavior of casino dealers—the mediating role of affective commitment and moderating role of supervisor support. *International Journal of Hospitality Management*, 40, 29-36. <http://doi.org/10.1016/j.ijhm.2014.03.005>.

Udin, U., Dananjoyo, R., Shaikh, M., & Vio Linarta, D. (2022). Islamic work ethics, affective commitment, and employee's performance in family business: Testing their relationships. *SAGE Open*, 12(1), 21582440221085263. <http://doi.org/10.1177/21582440221085263>.

Young, S. F., Richard, E. M., Moukarzel, R. G., Steelman, L. A., & Gentry, W. A. (2017). How empathic concern helps leaders in providing negative feedback: A two-study examination. *Journal of Occupational and Organizational Psychology*, 90(4), 535-558. <http://doi.org/10.1111/joop.12184>.

SUPPLEMENTARY MATERIAL

Supplementary Data 1 - Database A

Supplementary Data 1 - Database B

Supplementary material accompanies this paper: <https://doi.org/10.7910/DVN/7SQTUR>

Acknowledgments:

We thank the ad hoc reviewers for their constructive and useful comments for improving the manuscript. We are grateful for the financial support received for the development of the study. Ilse Maria Beuren acknowledges the financial support received from the National Council for Scientific and Technological Development (Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq), Brazil; Beatriz da Silva Pereira acknowledges the support received from the FAPESC Development Program to Postgraduate Studies in Higher Education Institutions in the State of Santa Catarina, Brazil; and Janete Pinto da Silva Martins acknowledges the support received from the Santa Catarina University Scholarship Program (Programa de Bolsas Universitárias de Santa Catarina – UNIEDU), from the State Department of Education of the State of Santa Catarina, Brazil.

Open Science:

Beuren, Ilse Maria; Pereira, Beatriz da Silva; Martins, Janete Pinto da Silva, 2024, “Supplementary Data - Do Cultural Controls Influence Affective Commitment in a Family Firm? Effects of Feedback/Feedforward, Work Pressure, and Counterproductive Behaviors”, <https://doi.org/10.7910/DVN/7SQTUR>, Harvard Dataverse, V1

Conflicts of interest:

The authors have no conflicts of interest to declare.

Copyrights:

RBGN owns the copyrights of this published content.

Plagiarism analysis:

RBGN performs plagiarism analysis on all its articles at the time of submission and after approval of the manuscript using the iThenticate tool.

Authors:

1 Ilse Maria Beuren, PhD in Controllershship and Accounting, Universidade Federal de Santa Catarina, Florianópolis, Brasil.
E-mail: ilse.beuren@gmail.com

2. Beatriz da Silva Pereira, PhD student in Accounting, Universidade Federal de Santa Catarina, Florianópolis, Brasil.
E-mail: beatriz.silva.p@gmail.com

3. Janete Pinto da Silva Martins, Master in Accounting, Universidade Federal de Santa Catarina, Florianópolis, Brazil.
E-mail: janetesilvaph@hotmail.com

Authors' contributions:

1st author: Definition of research problem; development of hypotheses or research questions (empirical studies); development of theoretical propositions (theoretical work); theoretical foundation/ literature review; definition of methodological procedures; literature review; statistical analysis; analysis and interpretation of data; critical revision of the manuscript; manuscript writing.

2nd author: Development of hypotheses or research questions (empirical studies); development of theoretical propositions (theoretical work); theoretical foundation/literature review; statistical analysis; analysis and interpretation of data; manuscript writing.

3rd author: Definition of research problem; theoretical foundation/ literature review; definition of methodological procedures; data collection; analysis and interpretation of data.