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Peer control, trust, and humility as antecedents of cooperation: an exploratory study

Controle de pares, confiança e humildade como antecedentes da cooperação: um estudo exploratório

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Abstract

This study investigated the relationship between peer control, a construct of management accounting generally associated with negative aspects, and humility in performance evaluation, a mediator of cooperation. We also examined the association between trust and cooperation. To address all these relationships, we did a single entity survey in a Brazilian subsidiary of a multinational insurance company, through a representative sample of 147 respondents. The results show that peer control is positively associated with cooperation and with humility in performance evaluation, and the latter is positively associated with cooperation. In addition, trust is also positively associated with cooperation. The results contribute to the literature by developing the humility construct in performance evaluation, which is the attitude after the manager is informed of the achieved outcomes, and by trying untested relationships, such as the role of peer control in cooperation. Results can also be useful for organizations that seek cooperation of their employees, suggesting that they should use peer control, since they contribute to an attitude of humility in evaluating performance, and therefore, to cooperation.

Resumo

Este estudo investigou o relacionamento entre o controle pelos pares, um construto da contabilidade gerencial geralmente associado a aspectos negativos, e a humildade na avaliação de desempenho, e esta como mediadora da cooperação. Também pesquisamos a associação entre confiança e cooperação. Para abordar todos esses relacionamentos, aplicamos um single entity survey em uma subsidiária brasileira de uma empresa multinacional de seguros, com uma amostra representativa de 147 respondentes. Os resultados apontam que o controle pelos pares está associado positivamente à cooperação e à humildade na avaliação de desempenho, e esta última à cooperação. A confiança também está associada positivamente à cooperação. Os resultados contribuem para a literatura ao desenvolver o construto humildade na avaliação de desempenho, que é a atitude após o gestor ser informado dos resultados alcançados, e por experimentar relacionamentos ainda não testados, como o papel do controle pelos pares na cooperação. Os achados também podem ser úteis para as organizações que buscam a cooperação dos colaboradores, sugerindo que elas usem o controle por pares, pois este contribui para uma atitude de humildade na avaliação de desempenho, e consequentemente, para a cooperação.

Practical implications

Companies should encourage direct peer control, a cheaper control technique that shows an attitude of humility in performance evaluation that affects cooperation. Our results also show that interpersonal trust favors cooperation. By practicing it, managers can create healthy work environments, avoiding excessive workloads.

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1 INTRODUCTION

Literature consecrates the role of management control as a whole set of artifacts, tools, procedures, and systems to encourage people to achieve organizational goals (Malmi & Brown, 2008; Ferreira & Otley, 2009). Among several requirements, a Management Control System (MCS), to be effective, must have the ability to integrate different parts of the organization for carrying out collective tasks (Bedford et al., 2016). To that end, cooperation between employees is necessary, especially when there is work increase in cross-functional and multi-department teams, at horizontal organizations (Chenhall, 2008). In addition, cooperation at work is essential for organizational success and better performance in a globalized economy (Marcus & Le, 2013).

Cooperation is generally attributed to a trusting relationship (Long, 2010, p. 373). Managers who build these relationships with their subordinates generate more cooperative behavior, making them commit to organizational goals. On the other hand, managers who emphasize controls show that they have less trust in subordinates, restrict their autonomy, and encourage them to resist controls (Long, 2010). Based on a review of experimental studies, Luft (2016, p. 84) observes that many components of the MCS, such as information and incentives, can lead to constructive or destructive actions by employees, depending on the context and other components of MCS, and trust is the basis for cooperation.

Trust is defined as skill, benevolence, and integrity (McEvily et al., 2003; Pirson & Malhotra, 2011). A type of control that can foster trust, but is little studied in the literature, is the control by peers (Loughry, 2010). It occurs when employees at the same hierarchical level or at the same field of knowledge exercise control over their colleagues; despite being widely used in the organizational environment, it is still poorly understood (Loughry, 2010). Peer control is based on the interdependence of tasks and public disclosure of performance by peers (Loughry, 2010), which can affect trust in employees' skills (Pirson & Malhotra, 2011); as managers become aware of peers' judgment, they can increase their confidence for delegating tasks.

Another element that can increase trust is fostering greater interpersonal relationships among the employees, which allows them to make value judgments about unpredictable behavioral aspects, such as benevolence and integrity (McEvily et al., 2003; Pirson & Malhotra, 2011), thus influencing trust in colleagues. The literature based on trust and control sees this relationship in different ways: controls can increase or decrease trust, or conversely, trust can be a replacement control element (Costa & Bijlsma-Frankema, 2007); or the formality of the performance appraisal system affects trust positively, according to Hartmann and Slapničar (2009).

Effective cooperation takes place when an individual contributes time, information, and other resources to help another one, expecting to be repaid in the future (Luft, 2016). Understanding how management control systems favor cooperation is an important issue for researchers and practitioners (Luft, 2016).

Distinct reactions can be observed when a performance evaluation process uses a MCS (Simons, 1987, 1990). This paper explores humility as one attitude in that process. It has been studied more intensely since the 2000s (Nielsen & Marrone, 2018), and is defined as a personal characteristic that involves self-regulatory capacity and avoids behaviors like pride, arrogance, and narcissism, encouraging a pro-social behavior. For Argandona (2015), humility is not a born virtue, being achieved by voluntary and deliberate repetition of acts, and also through examples, since it is an intuitive knowledge. In each situation, the manager has to decide what acts or actions are required for humility, and the author mentions examples of situations that require these decisions, such as underperforming, allowing others to give their opinions freely, or asking for advice. These actions, taken voluntarily and deliberately, provide the opportunity to practice humility by showing their limitations, requesting information from others, and listening to their opinions.

In a literature review, Nielsen and Marrone (2018) identified four components of humility (but the 4th is controversial). The first is accurate self-awareness, or having a precise view of yourself, by seeing your capabilities and accepting your mistakes and limitations.

Two others involve recognizing the importance of others, their strengths and contributions, and openness to feedback and teachability (ability to learn by instruction), which show the willingness to acknowledge and accept the views and feedback of others. For Li et al. (2021), employees' humility is positively associated with exchanging high-quality leaders and the centrality of employees' advisory network.

Nielsen and Marrone (2018) summarize the several variables regarding humility in order to explain their predictive validity for corporate results, and to encourage their inclusion in organizational and management studies. Several variables related to cooperation are already used in research, like team integration, team results, and social commitment, but they suggest that the direct relationship between humility and cooperation has not been studied yet.

Given these arguments, the research question that this article intended to answer was: what are the relationships between peer control, humility in performance evaluation, trust, and cooperation? To answer the question, we did a single entity survey in a Brazilian subsidiary of a multinational insurance company. We collected 147 responses and analyzed data by using structural equation modeling.

This paper contributes to the literature in three ways: (1) as far as the authors are aware, it is the first article that studies humility in the performance evaluation process; (2) it tries a set of constructs that have not yet been tested together, with emphasis on peer control and trust and cooperative partnerships; and (3) these relationships are important to understand a complex phenomenon that involves a management control construct called 'peer control', present in organizational routines, with organizational behavioral constructs, necessary to preserve employees' mental health. The contribution to practitioners consists of showing the benefits of management controls in keeping environments that favor cooperation.

2 HYPOTHESIS FORMULATION

This chapter presents a brief review of the tested constructs, followed by hypothesis formulation.

2.1 Cooperation

Despite being highly desirable for human interaction, definitions of cooperation are quite different. They range from the obligation to be done by more than one person, to involving rational choices, when selfishness is not justified economically, lack of interest, or hierarchy (Nechansky, 2018).

We followed the definition by Marcus and Le (2013) and Nechansky (2018), whose cooperation construct focuses on cooperation at the level of employees, within and between teams. Therefore, we developed this construct based on the central idea that cooperation involves teamwork and support from other areas, and that the result is achieved by the team; this follows the idea that the main attribute of cooperation is to reach something that would not be achieved individually (Pitafi et al., 2018).

2.2 Trust

Berry et al. (2009) addressed the topic of trust, observing that the relationship between trust and control is complex; but they considered trust as an alternative to control, and control as a basic condition for the existence of trust. Hartmann and Slapničar (2009) showed that formal control systems induce greater trust in supervisors, and this relationship is mediated by the perception of higher quality of feedback and procedural justice.

For Baldvinsdottir et al. (2011), there are some common definitions of trust. It is the willingness to accept vulnerability/risk, and depending on trust means acting with incomplete information. In this sense, trust can be seen as a way of reducing uncertainty; expectation of a certain behavior, usually based on past events; and, in economic modeling, it is based on the known self-interest of the trusted party. The conclusion is that trust is important in situations of dependence and cooperation (Baldvinsdottir et al., 2011, p. 408). Similarly, Lau and Sholihin (2005) state that several studies in management accounting found a significant relationship between performance evaluation and trust in the supervisor, and that greater interpersonal trust improves people communication.

2.3 Humility in the performance evaluation process

According to Argandona (2015), a humble person has a complete and balanced degree of self-knowledge, so that he/she does not underestimate or overestimate his/her strengths and weaknesses, successes and failures, and is able to assess the dignity, capabilities, and results of others appropriately.

To analyze humility in the organizational context, Owens et al. (2013) define expressed humility as an interpersonal characteristic that emerges in social contexts, and implies "a manifested desire to examine oneself accurately, an expressed appreciation of the strengths and contributions of others, and teaching ability" (Owens et al., 2013, p. 1518), focusing on the organizational environment. Humility is reflected in receptivity to feedback, a realistic self-assessment that is particularly beneficial for improving individual performance and team effectiveness.

Seckler et al. (2021) mention that humility is relevant for people focused on error control. This orientation shows a positive attitude towards mistakes and strategies for dealing with them, which involve avoiding their negative consequences, controlling any damage quickly, and reducing the occurrence of specific errors in the

future, as well as optimizing their positive consequences, such as learning and innovation (Frese & Keith, 2015).

Hence, as humility can be acquired by voluntary and deliberate repetition (Argandona, 2015), the identification of actions that can encourage the practice of humility is relevant in organizational relationships.

2.4 Peer control

Peer control occurs when employees at the same hierarchical level exercise control over the others; despite being widely used, it is still little understood (Loughry, 2010). One characteristic of peer control is that it does not always induce the achievement of organizational goals; it can also be contrary to organizational goals, and is often used without the intention of influencing behavior.

The author divides peer control, also called side control, into a 2x2 matrix. Regarding formality, control can be formal and informal. Formal controls have explicit rules that can create conflicts and mistrust between the organization and its members, and can be too costly, when used in excess. Informal controls, which do not always help in achieving organizational goals, generally favor trust and the perception of the legitimacy of formal controls. Another characteristic is that they are difficult to imitate, thus being a source of competitive advantage.

Our study adopted parts of this construct, with some differences from Loughry's (2010) design. Our measurement was more focused on informal peer control. The focus was on sharing information about results and on the performance of managers and employees in relation to other managers and employees. With the implementation of dashboard panels and automation of management reports, this became more common.

2.5 Hypothesis formulations

Peer monitoring allows self-assessment through everyone's contribution to strengthen the practice of humility. Owens et al. (2013) emphasize that humility is associated with receptivity to feedback, realistic self-assessment, and effectiveness of work teams. Argandona (2015), in turn, understands that humility is an intuitive knowledge that can be acquired through examples. Managers who have their performance monitored by peers can self-evaluate their performance by comparing to them. Since there is periodical change of positions, even managers with higher ratings realize that, depending on external conditions and their colleagues' performance, they can lose their position, which leads to an attitude of humility. Considering these arguments, we hypothesized:

H_i: Peer control is positively associated with humility in performance evaluation.

Garrett et al. (2019) show that controls can promote cooperative behavior, both among co-workers and between employees and their supervisors. The underlying idea is that, with peer control, managers can identify the practices of other colleagues, and those with lower performance can ask for help from those who perform better. Depending on the culture and compensation system, they should have interdependent goals, considering that peer control, especially for individuals with an attitude of collectivism, can awaken this sense of cooperative behavior (Marcus & Le, 2013). With peer control, information is available to everyone, so employees can identify colleagues who have the same difficulties, encouraging cooperation in knowledge-sharing initiatives focused on improving performance. Considering these arguments, we hypothesized:

H₂: Peer control is positively associated with cooperation.

An employee with a humble attitude in the performance evaluation process is aware that other colleagues can have superior performance, thus engaging in cooperative processes for two main reasons: (1) expectation of a potential later reward, with future help from another colleague (Luft, 2016); and (2) search for feedback from others, seeking to understand the different standpoints of colleagues on his/her performance.

Hilbig and Zettler (2009) identified that humble-honest people are more likely to work together. Hilbig et al. (2013) identified that humility-honesty is positively associated with active cooperation, while kindness is associated with reactive cooperation.

Considering these findings, we hypothesized:

H₃: Humility in performance evaluation is positively associated with cooperation.

According to Tanghe et al. (2010), for people who manage the uncertainty associated with any social interaction, trust improves cooperation, while mistrust or lack of trust in others' intentions prevents cooperation. Acedo and Gomila (2013) identified that trust enhances cooperation, and this relationship increases people's networks. For Long (2018), subordinates who trust their managers are more likely to cooperate, as they believe that managers share the same values and defend their interests (Balliet & Van Lange, 2013), or at least similar interests.

According to studies on accounting and trust (Baldvinsdottir et al., 2011), we developed hypothesis:

H₄: Trust is positively associated with cooperation.

Figure 1 shows the theoretical model.

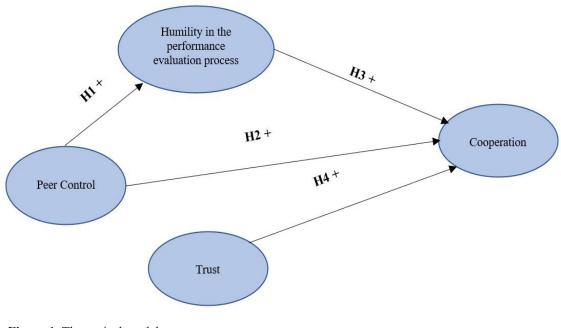


Figure 1. Theoretical model Source: Elaborated by the authors.

3 METHODOLOGICAL DESIGN

3.1 Method

We did a single entity survey, considered by Van der Stede et al. (2005) as an individual analysis, addressing a single organization. Data on respondents and construct measurement were not presented in this paper, but can be accessed from the first author.

3.2 Company, population, sample, data collection and constructs measurement

The company studied was Conceptual Insurance (a fictitious name), a subsidiary of an international insurance conglomerate. The firm has a contemporary and dynamic performance management system, composed of cybernetic, reward, administrative, and cultural controls (Malmi & Brown, 2008). All employees are evaluated

annually by the 360-degree model, where results achieved are always compared with established goals, and are available daily to all leaders, who have access to the organization's management system.

The final sample of 147 respondents accounts for a response rate of 63.6%. All company's departments were represented in the sample, and data were collected during October 2019.

4 RESULTS AND DISCUSSION

4.1 Measurement evaluation

The exploratory analysis with all indicators extracted four main components with eigenvalues higher than 1; the first component extracted 34.5% of the total variance, so there was no evidence that the common method bias was a problem in this model (Podsakoff et al., 2003).

To check convergent validity, the model in Figure 1 was first run through SmartPLS, using all items, and only one item was excluded for presenting a factor loading below 0.60. The other constructs presented acceptable Cronbach's alpha values, since the coefficients were above 0.70 (Tenenhaus et al., 2005), except for confidence (0.681) and humility in performance evaluation (0.679), but these indicators were close to the cutoff value of the study (Hair et al., 2011; Hair et al., 2009; Henseler et al., 2009). Furthermore, composite reliability coefficients were all above 0.70 (Hair et al., 2011, 2009; Henseler et al., 2009); therefore, all constructs were accepted. All AVE had values above the minimum required - 0.5 (Fornell & Larcker, 1981; Hair et al., 2009). To check discriminant validity, the square root of AVE was calculated and is presented in the diagonal matrix (Table 1). These values are above the construct intercorrelations, ensuring discriminant validity (Fornell & Larcker, 1981).

Table 1. Matrix correlation and measurement model assessment							
Latent variable	1	2	3	4			
1 - Trust	0.784						
2 - Peer control	0.465	0.741					
3 - Cooperation	0.461	0.599	0.740				
4 - Humility in performance evaluation process	0.410	0.545	0.623	0.780			
Cronbach alpha	0.681	0.724	0.724	0.679			
Composite Reliability (CR)	0.826	0.828	0.828	0.824			
Average Variance Extracted (AVE)	0.615	0.548	0.547	0.609			

Table 1. Matrix correlation and measurement model assessment

Note: The values in the diagonal are AVE square root, and values below the diagonal are correlations. Source: Elaborated by the authors.

4.2 Structural equation analysis

Structural equation modeling was used through the Partial Least Squares (PLS) approach and SmartPLS 3.0 software to assess the proposed model. PLS maximizes the explained variance of the dependent variables (Chin & Newsted, 1999, p. 312; Hair et al., 2011), and is recommended for testing theories and models in their exploratory and development stages (Hair et al., 2011).

According to Tenenhaus et al. (2005, p. 173), redundancy indicators also helped to assess the quality of the structural model. To evaluate the stability coefficients, 5,000 samples of 147 cases were bootstrapped (4,999 degrees of freedom and two-tailed test) with a 95% confidence interval (Chin & Newsted, 1999, p. 328; Hair et al., 2011, p. 145). Table 2 presents the bootstrapping path coefficients and their t-tests.

Table 2. Structural model results								
	Original sample	Standard deviation	T value	P value	R ²			
H_1 : Peer control \rightarrow Humility in Performance evaluation process	0.545	0.066	8.250	0.000	29.7%			

Table 2. Structural model results						
	Original sample	Standard deviation	T value	P value	R ²	
H_2 : Peer control \rightarrow Cooperation	0.315	0.079	4.011	0.000		
H_3 : Humility in performance evaluation process \rightarrow Cooperation	0.387	0.083	4.652	0.000	50.2%	
H_4 : Trust \rightarrow Cooperation	0.156	0.077	2.019	0.044		

Source: Elaborated by the authors.

4.3 Result discussion

Hypothesis H_1 was confirmed, since peer control was positively associated with an attitude of humility in performance evaluation. It is noteworthy that almost 30% of the variations in the HAD construct originate from a positive association with peer control. This may indicate that peer monitoring allows self-assessment, reinforcing the practice of humility (Loughry, 2010). The transparency of results for all peers strengthens a stance of humility, especially when there are peers with better performance than those evaluated.

Hypothesis H_2 , which assumed a positive association between peer control and cooperation, was also confirmed. These results are in line with Luft's (2016) findings. It also reinforces the evidence from Garret et al. (2019), that controls can promote cooperative behavior. The results suggest that peer control, where there is visibility of peers' performance, leads to greater cooperation, since there is an expectation that in the future this cooperation will be mutual (Luft, 2016).

Hypothesis H_3 , that assumed a positive association between humility in performance assessment and cooperation, was also confirmed. These results show that previous studies had assumed this association, but in this case with humility as an organizational construct, and not specific for the management control process. The results confirm that professionals who have a humble attitude in the performance evaluation process show a behavior that favors cooperation. A potential explanation is that they understand that results are not achieved only by their own efforts, and searching for peer contributions is important for their own results, in addition to expecting a counterpart in the future (Luft, 2016).

Hypothesis H_4 , which assumed a positive association between trust and cooperation, was also confirmed, indicating that trust facilitates cooperation between employees, in line with Tanghe et al. (2010). The results also suggest that, for our sample, trust in superiors resulted in higher cooperation with colleagues, favoring a climate of sharing and mutual help among employees.

5 FINAL REMARKS

Results indicate that direct peer controls are positively associated with a stance of humility in performance evaluation. They contribute to the academic literature by showing the importance of peer control for influencing humility in performance evaluation. Humility is considered a strategic virtue, and can be learned and influenced by culture (Vera & Rodriguez-Lopez, 2004). This attitude contributes to avoiding an arrogant view of competitors and of your own performance, and also avoids taking risks in order to preserve company's continuity. Peer control ends up encouraging an attitude of humility, since there may be changes in performance; that is, a manager who is currently doing better than his/her peers may, in another instance, have a lower performance; through shared information, it is possible to identify this change in performance, favoring a stance of humility in performance evaluation. Recognizing errors, analyzing failure causes, encouraging a second chance for employees, and learning from other organizations' examples are important organizational features positively associated with peer control.

Interpersonal trust was also positively associated with cooperation, suggesting that trusting superiors promotes cooperation. According to Kump (2022), professionals who put themselves in a situation of vulnerability before their hierarchical superiors contribute to cooperation between the professionals who work under that same leader. Humility stimulates cooperation among employees. It happens because managers with this attitude recognize not having all capabilities and resources needed to always perform well. They need support from other areas' managers and colleagues. In order to receive favors in the future, they are more open to cooperate today.

The results are also relevant for practice in organizations, particularly to encourage direct peer control, which is a low-cost type of control, and has shown its contribution to generating a humble attitude in performance evaluation. This stance of humility favors cooperation, and is an attribute increasingly recognized in organizations

that understand that results are built collectively. Cooperation is important because business areas, departments, and professionals are more and more involved in interdependent processes, especially when organizational failures increase, and there is a need for mutual help and collaboration to carry out business activities. Managers can also encourage this attitude by creating an organizational environment that favors interpersonal trust, and consequently cooperation between employees, between teams, and even between subsidiaries. This can generate healthy work environments, avoiding excessive workloads that harm employees' health.

As with all surveys, the results should be generalized very carefully, as we studied a single organization - readers must consider the set of characteristics that define that company, in order to interpret them in light of their own organizations' conditions. On the other hand, the company is considered innovative and highly ranked in financial performance, and, according to Rajgopal (2020), professionals are interested in learning the practices of organizations above the average.

Future studies can use the survey technique in specific industries and investigate other effects of humility on performance evaluation, such as employees' own performance, or even dysfunctional behaviors. Interventionist studies and interpretative research are suggestions for highlighting new aspects on the topic.

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