

# People Management Practices, Managerial Innovation, and Organizational Commitment Profiles

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## Abstract

**Purpose** – This study aimed to investigate whether managerial innovation and people management practices focused on innovation act as antecedents of organizational commitment profiles.

**Theoretical framework** – For the investigation of organizational commitment, we used the three-component model (TCM) (Meyer & Allen, 1991) and the commitment profiles approach (Meyer, Stanley, & Parfyonova, 2012). For the investigation of managerial innovation and people management practices focused on innovation, we considered the contributions of Laursen and Foss (2011) and Lopes (2017), as well as other studies from the national and international literature.

**Design/methodology/approach** – This is quantitative, explanatory field research, using a sociodemographic questionnaire and Likert scales, with a sample of 470 workers. The research field was composed of two federal universities, on 10 campuses, located in the Brazilian northeast. For the data analysis, we used descriptive statistics, exploratory factor analysis, latent profile analysis, and binary logistic regressions.

**Findings** – We identified four organizational commitment profiles: strongly uncommitted; moderately committed; committed; and uncommitted. Only the delegation and tangible and intangible incentives practices acted as antecedents for certain profiles.

**Practical & social implications of research** – The main theoretical contributions were the outlining of organizational commitment profiles and highlighting of people management practices focused on innovation with predictive power in relation to such profiles, which may suggest, for management, the strengthening of practices focused on innovation that promote workers' commitment at public universities.

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## How to cite:

Montenegro, A. V., Pinho, A. P. M., & Tupinambá, A. C. R. (2022). People Management Practices, managerial innovation, and organizational commitment profiles. *Revista Brasileira de Gestão de Negócios*, 24(4), p.755-773. <https://doi.org/10.7819/rbgn.v24i4.4207>

Received on:

Mar/18/2021

Approved on:

Oct/07/2022

Responsible editor:

Prof. Teresa Proença

Reviewers

Nágila Vilela; the other reviewer declined to disclose his name

Evaluation process:

Double Blind Review

This article is open data



Revista Brasileira de Gestão de Negócios

<https://doi.org/10.7819/rbgn.v24i4.4207>

**Originality/value** – The originality of the research lies in it addressing organizational commitment profiles, connecting them with managerial innovation and people management practices focused on innovation, which seeks to contribute to overcoming the research gaps at a national level.

**Keywords:** Organizational commitment profiles, managerial innovation, people management practices focused on innovation.

## 1 Introduction

Considered one of the constructs of interest for the research and organizational practice, organizational commitment (OC) is a form of psychological bond between a worker and organization, which implies the decision to remain in the organizational environment (Meyer & Allen, 1991; Meyer, 2009). The construct has been studied using the person-centered approach, which highlights the possibility of a worker simultaneously experiencing different dimensions of commitment, that is, different organizational commitment profiles (Meyer et al., 2012), whose studies are predominant in other countries (Kam et al., 2016; Meyer et al., 2012; Meyer et al., 2013; Meyer et al., 2018) and relatively scarce in Brazil (Bandeira et al., 2000; Medeiros et al., 1999). In Brazil, these studies have not followed propositions used internationally and they have not used the latent profile analysis technique, commonly used in the international context.

The antecedents of commitment include management practices, which are a set of characteristics and actions carried out in the organizational context related to aspects such as people management, leadership style, organizational structure, and organizational modernity (Peixoto & Souza, 2015). However, it is observed that most of the studies that connect these practices to OC do not address people management practices (PMP) focused on innovation, nor do they consider managerial innovation (MI) within the research scope (Aboramadan et al., 2020; Oliveira et al., 2014; Stecca et al., 2016). In turn, when the antecedents of the OC profiles are analyzed in the literature (Kam et al., 2016; Meyer et al., 2012; Meyer et al., 2013; Meyer et al., 2018), there are no studies that connect management practices to the profiles.

There is also a relative scarcity in the national literature of studies that explicitly address PMP focused on innovation in public higher education institutions (HEIs). The studies found commonly adopt the perspective of analyzing traditional PMP (Montezano et al., 2019; Tomazzoni et al., 2017). This gap is present in the literature

covering the Brazilian public sector, which according to Brandão and Bruno-Faria (2013) presents limited scientific production regarding innovation, which is related with evolutions and transformations in public management as a whole (Montezano & Isidro, 2020). Demo et al. (2018) also highlight gaps in the research on people management relating to the in-depth study of certain practices and the improvement of measures.

With regard to the practical-managerial justification for this research, we highlight that identifying people management practices that favor organizational commitment plays a valuable role in the context of the public sector, given that this identification can create support for managers' actions, in the sense of strengthening certain practices and/or investing in the development of new people management practices. In addition, the results of this research could help the institutional strategic planning – with regard to management practices/actions – of the organizations in question.

Considering the gaps mentioned both in the field of OC and in MI as well as the lack of research that connects the two fields, along with the potential practical-managerial contributions, this article aimed to investigate the impact of managerial innovation and people management practices focused on innovation on organizational commitment profiles.

## 2 Theoretical framework

### 2.1 Organizational commitment and the profiles approach

OC is understood as a stabilizing force, which directs individual behavior, involving a course of action. It is also related with aspects linked to management and leadership style, as well as other aspects of the work context, along with the organizational culture and job satisfaction (Ali & Kashif, 2020).

Mowday et al. (1979) considered commitment in a one-dimensional way. Subsequently, Meyer and Allen

(1991) proposed the model of three dimensions: affective, normative, and continuance.

The affective dimension is understood as “desire,” involving the worker’s identification with the organization, belief in and acceptance of organizational objectives and values, effort on behalf of the organization, and desire to remain there (Mowday et al., 1979). The normative dimension is characterized by the feeling of moral indebtedness or obligation in relation to the organization (Weiner & Vardi, 1990). The continuance dimension involves the evaluation of costs, of a social and psychological nature, involved in a possible departure from the organization, considering the magnitude of investments made to be there and limitation of alternatives outside the organization (Becker, 1960).

Antecedents of OC include personal demographic characteristics, such as age and sex, values, organizational characteristics, individual differences, and work experiences (Bastos et al., 2013).

OC has been investigated using the variable-centered approach, which considers the effect of each dimension of organizational commitment individually. Examples include investigations that seek to understand the specific effects of the affective dimension of commitment and, at other points, singular effects of the normative dimension in isolation (Pinho et al., 2022a).

Subsequently, the person-centered approach proposes an examination of the interactions between the three dimensions of commitment, connecting with profiles of the construct (Meyer & Parfyonova, 2010). This approach indicates the possibility of the worker simultaneously experiencing different dimensions of commitment, to varied degrees, which enables the comparison between different workers, based on various configurations derived from the combinations of the dimensions in each individual. These combinations between the dimensions enable the creation of commitment profiles (Pinho et al., 2022a).

While each dimension of commitment is individually understood as a mindset (set of mental characteristics), the OC profiles involve a combination of mindsets (Meyer & Herscovitch, 2001). There are various examples of particular commitment profiles in the literature, as can be observed in Chart 1. Other denominations can be found, such as “uncommitted” (low levels of all the bases/dimensions of commitment), “highly committed” (high levels of all the bases/dimensions of commitment), “moderately committed” (moderate levels of the bases/dimensions of commitment), “affectively committed”

**Chart 1**  
Organizational commitment profiles identified in the literature

1 All the bases/dimensions high
2 All the bases/dimensions moderate
3 All the bases/dimensions low
4 Dominant affective base/dimension
5 Dominant normative base/dimension
6 Dominant continuance base/dimension
7 Dominant affective and normative bases/dimensions
8 Dominant affective and continuance bases/dimensions
9 Dominant normative and continuance bases/dimensions

Source: Adapted from Meyer et al. (2012, p. 4).

(high levels only in the affective dimension), “normatively committed” (high levels only in the normative dimension), and “continuance committed” (high levels only in the continuance dimension). There can also be profiles with combinations between the dimensions, such as “combined affective and continuance committed” and “combined affective and normative committed” (Kam et al., 2016; Meyer et al., 2012; Meyer et al., 2013; Meyer et al., 2018).

The recent study of Pinho et al. (2022a) identified six organizational commitment profiles, based on results obtained in the Brazilian public university sector: “uncommitted,” “highly committed with dominance of the normative and continuance dimensions,” “moderately committed,” “moderately committed above the mean,” “moderately committed below the mean, with dominance of continuance commitment,” and “moderately committed below the mean, with dominance of affective commitment.”

Besides the bibliographical survey carried out by Meyer et al. (2012) and by Kabins et al. (2016), there are records of studies with OC profiles in countries such as Canada, Portugal, Italy, Belgium, Turkey, the United States, and Germany (Kam et al., 2016; Meyer et al., 2012; Meyer et al., 2013; Meyer et al., 2018). With regard to the specific antecedents and consequences of the organizational commitment profiles, the study of Kabins et al. (2016) indicated that high levels of the commitment dimensions were associated with value-based profiles, while low levels of the commitment dimensions were related to weak commitment profiles. The value-based profiles presented higher levels when considering constructs such as stability, performance, and organizational citizenship.

Considering these studies – notably with regard to the emergence of different commitment profiles in different studies – the first hypothesis was formulated:

**H<sub>1</sub>:** Multiple OC profiles can be identified among workers from the sample studied.

## 2.2 Public higher education institutions

Within the wide spectrum of public organizations, it is possible to identify public higher education institutions (HEIs), which are subject to the influence of political-institutional, economic, and cultural questions (Ribeiro, 2017). These institutions have a unique dynamic and often depart from the traditional corporate structure, as well as facing an impasse between “adopting the new and conserving the old” (Ribeiro, 2017, p. 365). Considering the expansion of the private sector in the field of higher education and policies to increase places in public education, there are notorious pressures related to the modernization of managerial and administrative practices in such institutions. In light of these pressures and the institutional complexity (Prates et al., 2012), it is important to focus on analyzing management models and practices in such organizations.

In the context of public HEIs, there are important challenges related to the field of management, as well as reflections of dilemmas of an institutional nature, such as bureaucratic compulsion, excess normalization, resistance to change, corporatism, functional rigidity, a high power distance, and the blocking of new ideas (Vieira et al., 2006).

The aforementioned scenario favors convergence with the bureaucratic model, making innovative processes difficult. Among the possibilities identified in the literature, some that could favor the convergence of HEIs with management models include decentralization, participation, the promotion of autonomy, and the reduction of hierarchical levels (Falqueto & Farias, 2013; Vieira et al., 2006).

Peixoto and Souza (2015) and Janissek et al. (2013) argued about the need for transformations in the managerial structure of universities, indicating that, in various cases, there appears to be the coexistence of administrative structures of an archaic nature with technological innovations.

With regard to the question of leaderships in the context of public HEIs, challenges are observed related to their ambiguous and multifaceted role, considering that

various managers are also university professors, assuming the role of “professor-managers.” Moreover, there are difficulties in structuring practices considering principles of public management and competence management (Burigo & Laureano, 2013; Fleck & Pereira, 2011; Pereira et al., 2015).

Other studies are also observed in the field of public HEIs that focus on questions related to turnover intention, job satisfaction, people management practices, and managerial innovation (Montenegro et al., 2021; Pinho et al., 2022b). When carrying out a recent study of employees in a public HEI, Pinho et al. (2022b) highlighted that certain people management practices – involvement, job conditions, and remuneration and rewards – negatively influenced the employees’ turnover intention. On the other hand, the aforementioned study identified that the recruitment and selection practice positively influences turnover intention. The present article – presented here – brings new elements, as it addresses managerial innovation and people management practices focused on innovation.

## 2.3 People management practices focused on innovation and managerial innovation

MI is an innovation process adopted within a management perspective, consisting of the coordination and engagement of people to develop new ideas. It is not limited to technological innovation, involving processes and activities related to management. It is possible for there to be an association between technological and managerial innovations with important effects over organizational performance (Damanpour, 2014).

MI is “the introduction of something new to the firm in the following dimensions: managerial activities and practices, management processes, and organizational structures” (Lopes, 2017, p. 29). Managerial activities and practices correspond to the nature and form in which they are carried out, especially by the organization’s managers. Management processes are routines, processes, and procedures linked to the activities developed by managers, such as strategic planning, internal communication, and knowledge management. Organizational structures are the organization and distribution of hierarchical levels, lines of command, and accountability.

There appears to be a big relationship between MI and people management (Rodrigues & Veloso, 2013). PMP focused on innovation are practices supported by



management models, linked to various organizational aspects, such as strategic planning and decision making and with the potential to favor innovation processes in the organizational context (Becker & Huselid, 2006). It is also highlighted that MI relates with other types of management practices, such as quality ones (Fernandes et al., 2014). In a study conducted in two public higher education institutions, Montenegro et al. (2021) highlighted that people management practices focused on innovation – delegation and training – were prominent in the sample studied. In addition, 55.7% of the respondents perceived managerial innovation in their work contexts, especially in the area of people management.

Study initiatives regarding such practices are identified in the literature, such as the proposal from Janissek et al. (2017a) and from Lopes (2017). Janissek et al. (2017a) propose innovative management practices, dividing them into people management, organizational management, and process modernization. Based on Laursen and Foss (2014), Lopes (2017), in turn, indicates five groups of PMP focused on innovation: delegation – aspects such as autonomy promotion and decentralization of decisions; recruitment and retention – recruitment and selection and worker retention; incentives – rewards, of an individual and collective nature, associated with performance; training – various types and formats of training and capacitation, including formal, internal, and external; and communication – information flows at various levels and in various directions and information sharing.

Such practices, according to Becker and Huselid (2006), have the potential to favor innovative processes in the organizational context. The PMP mentioned have the challenge of assuming a strategic role in organizations, relating with change and innovation processes (Armstrong, 2014; Dessler, 2002; Silvestre & Araújo, 2013). Becker and Huselid (2006) highlight that managerial innovation occurs in a particular complex organizational context, linked both with organizational strategy and PMP. When the specific context of public higher education institutions (HEIs) is considered, PMP focused on innovation and MI face limitations and challenges for their implementation and consolidation, given the cultural (traditionalism, excess bureaucracy, and hierarchization) and normative questions (own regulations) (Ribeiro, 2017). Thus, certain practices may be considered consolidated in a particular context and focused on innovation in different contexts (Queiroz et al., 2013; Spink, 2003).

From a traditional perspective, PMP involve recruitment, selection, training, performance management, and remuneration with strategic development objectives (Armstrong, 2014; Dessler, 2002). In the international context, it is possible to identify studies that explore these practices in public HEIs, in connection with constructs such as OC, workplace wellbeing, productivity, and knowledge management (Aboramadan et al., 2020; Franco-Santos & Doherty, 2017; Govender et al., 2018; Nuryanto & Pambuko, 2019; Szelągowska-Rudzka, 2018). On the other hand, there are also records of studies that cover MI in public HEIs, in connection with constructs such as organizational learning, knowledge management, and quality management practices (Aminbeidokhti et al., 2016; Ngoc-Tan & Gregar, 2018; Sciarelli et al., 2020).

Demo et al. (2013) and Pinho et al. (2020b) indicate that PMP can be considered as predictors of OC, and Chambel (2012) and Oliveira et al. (2014) confirmed relationships between such practices and affective OC. Besides the traditional practices of people management, MI and PMP focused on innovation have the potential to work as antecedents of OC (Zhou et al., 2013). Other studies also indicate relationships between commitment and processes related to innovation. In a survey of executives from the retail sector in different countries, Jafri (2010) indicated that innovative behavior is related to commitment. In a study conducted with 179 Chinese organizations, Zhou et al. (2013) indicated that the commitment philosophy can enable results linked to innovative processes. In research conducted with 87 Spanish research and development (R&D) departments, Camelo-Ordaz et al. (2011) highlighted the mediating role of commitment in the relationship between people management practices and innovation.

Regarding OC in public organizations, the predominance of affective OC is highlighted, related to aspects such as the organization's significance to the employee and interest in expending efforts in favor of the organization, based on results in a federal university (Campos et al., 2009; Oliveira & Honório, 2020; Pinho et al., 2020a; Rocha & Honório, 2015). On the other hand, studies are observed that also indicate the presence of the normative (Vespasiano & Mendes, 2017) and continuance dimensions (Rocha & Ceretta, 2013) in public organizations, respectively associated with the obligation to remain derived from organizational norms and values, and with the evaluation of lost stability and

other advantages. Based on these studies, the following hypotheses are formulated:

**H<sub>2</sub>:** MI acts as an antecedent of OC profiles characterized by different dominances of the affective, normative, and continuance dimensions and does not act as an antecedent of uncommitted profiles (those that present low levels of connection in the three dimensions – affective, normative, and continuance).

**H<sub>3</sub>:** PMP focused on innovation act as antecedents of profiles characterized by different dominances of the affective, normative, and continuance dimensions and do not act as antecedents of uncommitted profiles.

## 3 Method

### 3.1 Design

This is quantitative, exploratory field research. The research field was constituted of two federal universities, on 10 campuses, located in the Brazilian northeast, with 371 of the respondents being from one of the universities and 99 from the other, totaling 470 respondents (366 technical civil servants and 104 outsourced staff). The sample obtained represented approximately 8.5% of the civil servants and 34.6% of the outsourced staff of the two universities. Regarding the institutional profile, the first university was created in the 1950s and has seven campuses, while the second one was created in the 1970s and has nine campuses. The two institutions have a similar organizational structure.

Considering the objective of this article, the number of participants was considered adequate given the techniques used, taking into account, for example, the proportion of 10 respondents per scale item, the presence of 100 respondents, and sample sizes related to the factor loadings (Beavers et al., 2013; Damásio, 2012; Hair et al., 2009).

The outsourced workers were included with the aim of exploring the perception of different actors in the same organizational environment. The positions occupied by the respondents and the sectors of activity followed a heterogeneous distribution, with administrative units

among their composition. With regard to the ethical procedures, the research was approved by the Research Ethics Committee, under opinion n. 24747119.4.0000.5954.

### 3.2 Scales

The data collection instrument (Appendix) was composed of: (i) questions for an investigation of sociodemographic and occupational data; (ii) an OC scale, based on an adaptation of Pinho's (2009) scale; and (iii) a scale of PMP focused on innovation and MI, with adaptations (Lopes, 2017). The scales were six-point Likert-type ones, ranging from "I totally disagree" to "I totally agree." General adaptations were made in the scale of PMP focused on innovation and MI, maintaining the items specifically relating to MI and PMP focused on innovation and not using items relating to product and process innovation, thus adjusting to the research objectives. We also made an adaptation for the outsourced staff, who did not answer questions related to recruitment and retention and tangible and intangible incentives practices, due to the aspects covered in these practices referring to the hiring company and not to the university in which they work.

### 3.3 Data treatment and analysis

The sociodemographic and occupational data were treated using descriptive statistics. Regarding the reliability of the scales, the Cronbach's alpha was verified. To verify the grouping of the items, exploratory factor analysis was carried out, observing values of the Kaiser-Meyer-Olkin [KMO] measure, the Bartlett sphericity test, and variance explained by the factor. To outline the OC profiles, an analysis of the latent profiles was carried out. To verify the predictive power of the PMP focused on innovation and of the MI in relation to the OC profiles, binary logistic regressions were carried out, since the profiles are categorical variables. The Statistical Package for the Social Sciences and Mplus were used.

## 4 Results

### 4.1 Sample profile

The 470 respondents had an average age of 39 years and most were female (58.03%), single (44.30%) or married (41.50%), with children (52.60%), two dependents on average, with an income between R\$2,000.00 and

R\$ 5,000.00 (34.00%). Most worked 40 hours a week (70.20%) and the average time of service was 9.5 years.

### 4.2 Data reliability

To verify the homogeneity of the scales, corrected item-total correlations were run. The amplitude of the correlation values ranged from 0.45 to 0.70 for the PMP focused on innovation scale, and from 0.40 to 0.71 for the OC scale, satisfying the cut-off point established by the literature ( $r_i.t < 0.30$ ; Pasquali, 2009). In light of these results, it is indicated that the scale items are homogeneous. In addition, the Cronbach's alpha results were verified and considered favorable. They can be seen in Table 1,

We also evaluated the adequacy of the data matrix to carry out the factor analysis, running the Kaiser-Meyer-Olkin (KMO) test and Bartlett sphericity test, whose results were satisfactory [ $\chi^2 (171) = 6,277.15$ ;  $p < 0.001$ ;  $KMO = 0.91$ ], thus enabling the execution of the factor analysis (Pasquali, 2009).

### 4.3 Item grouping

Exploratory factor analyses were carried out, employing the principle components extraction method, without rotation and a fixed number of factors. To establish the quantity of factors, the Kaiser, Cattell (scree-plot), and Horn (parallel analysis) criteria were used. In the case of the OC scale, the first criterion indicated the presence of three factors, which can also be seen in the Cattell criterion and are corroborated by the Hull criterion, given that the fourth factor of that criterion (1.21) has a higher value than the fourth factor of the Kaiser criterion (0.80). Based on these results, we proceeded to the exploratory factor analysis, using the principle components method, with oblique rotation, this time setting the number of factors

at three for the OC, considering the value of  $|0.40|$  as a minimum factor loading to belong to a factor. The results indicated that factor 1 contemplates the items from the affective dimension, factor 2 covers the items from the normative dimension, while factor 3 includes the items from the continuance dimension.

For the PMP focused on innovation scale, in turn, it was observed that factor 1 contemplates the delegation items, factor 2 covers the recruitment and retention items, and factor 4 includes training items. Regarding factor 3, the only one with five items, this grouped incentives and communication items. Considering that the new factor included aspects linked both to tangible (remuneration) and intangible rewards (possibility of job rotation and knowledge exchange with colleagues), we decided to call it tangible and intangible incentives.

### 4.4 Analysis of latent profiles of organizational commitment

To identify the OC profiles, a latent profile analysis (LPA) was carried out, using the maximum likelihood estimator. To estimate the profiles, we used the three factors from the OC scale, initially estimating two profiles, and then that number was successively increased for subsequent comparison (Mäkikangas et al., 2018; Nylund et al., 2007; Vermunt & Magidson, 2002). The models were evaluated according to the following criteria: Akaike information criterion (AIC), Bayesian information criterion (BIC), sample-adjusted Bayesian information criterion (SABIC), Lo-Mendell-Rubin test (LRT), bootstrapped likelihood ratio test (BLRT), and number of components in each profile. Low AIC, BIC, and SABIC values indicate a more adequate model, while significant LRT and BLRT values ( $p < 0.05$ ) indicate

Table 1  
Reliability of the dimensions covered

Construct	Dimensions	Cronbach's alpha
PMP focused on innovation	Delegation	0.87
	Recruitment and retention	0.78
	Tangible and intangible incentives	0.79
Organizational commitment	Training	0.88
	Affective	0.90
	Normative	0.91
	Continuance	0.90

the selection of the most complex model (Muthén & Asparouhov, 2012).

In Table 2 it is possible to observe the distribution of the indicators for six profiles.

Based on the model estimation, six profiles were initially generated, but the results indicated that the model with four profiles was most adequate, given that the p values for the LMR based on that model are not significant, indicating that less complex models should be prioritized, according to Table 2. The four latent profiles, with their characterization, can be seen in Figure 1 (which was reorganized to enable comprehension), as well as the characteristics relating to the predominance of the three commitment dimensions: affective, normative, and continuance.

Based on an analysis of Figure 1, the profile distribution enables it to be identified that profile 1 has a

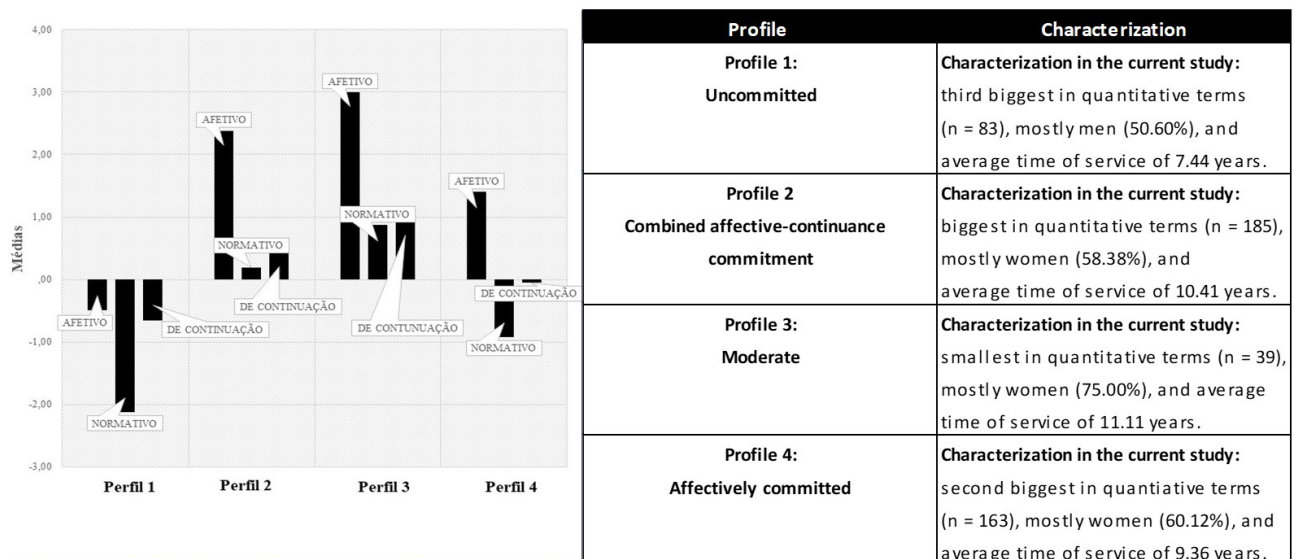
low level of OC for the three dimensions, which enabled it to be called “uncommitted.” Profile 2 is marked by a high level of affective OC and low levels of normative and continuance OC, with the latter having slightly higher levels than normative OC, which enabled it to be called “combined affective-continuance committed.” Profile 3 is characterized by a high level of affective OC and moderate levels of normative and continuance OC, which enabled it to be called “moderate.” Profile 4 is characterized by a positive level of affective OC and negative indices for normative and continuance OC, which enabled it to be called “affectively committed.”

Therefore, hypothesis 1 ( $H_1$ : *Multiple OC profiles can be identified among workers from the sample studied*) was confirmed based on the identification of the four commitment profiles in the sample, aligning with the studies of Meyer et al. (2012) and Meyer et al. (2013).

**Table 2**  
**Distribution of the adjustment indicators**

Models	AIC	BIC	SABIC	p LMR	p BLRT
2 profiles	7,371.64	7,413.17	7,381.43	< 0.0001	< 0.0001
3 profiles	7,310.25	7,368.39	7,323.95	< 0.0001	< 0.0001
4 profiles	7,135.32	7,210.06	7,152.94	0.31	< 0.0001
5 profiles	6,264.14	6,355.50	6,285.67	0.58	< 0.0001
6 profiles	6,255.29	6,363.26	6,280.74	0.08	< 0.0001

Note: p LMR = Lo-Mendell-Rubin probability.



**Figure 1.** Commitment profiles outlined

Note: médias = means; perfil = profile; afetivo = affective; normativo = normative; de continuação = continuance.



### 4.5 People management practices focused on innovation and managerial innovation as antecedents of the organizational commitment profiles

After identifying the OC profiles, we verified which practices present predictive power in relation to those profiles, using binary logistic regressions, since the profiles are categorical variables. We did not use multinomial logistic regression, with a view to having an individualized evaluation of each profile, comparing it with the others in general. We therefore tested whether the PMP focused on innovation, as well as the perception of some MI process in the organization in the last three months, were capable of predicting whether a worker belonged or not to a particular profile. The regression results can be seen in Table 3.

We identified the best predictive model for each OC profile, using as tested antecedents the PMP focused on innovation and MI. For profile 1 (uncommitted) [ $\chi^2(3) = 69.64; p < 0.0001; R^2_{Nagelkerke} = 0.27$ ], only the delegation and recruitment and retention practices were obtained as significant predictors, in which the perception was negative; that is, a low score in the delegation and recruitment and retention practices increases the chance of a worker belonging to that profile. For profile 2 (combined affective-continuance committed) [ $\chi^2(2) = 49.63; p < 0.0001; R^2_{Nagelkerke} = 0.17$ ], the predictors were delegation and recruitment and retention, with a positive perception; that is, the higher the score in these practices, the more chances of belonging to the profile. For profile 3 (moderate), only the delegation practice appeared as a significant predictor [ $\chi^2(1) = 9.53; p = 0.002; R^2_{Nagelkerke} = 0.06$ ], with a positive perception.

Finally, we did not identify a statistically significant model for profile 4 (affectively committed) [ $\chi^2(1) = 3.30;$

$p = 0.07; R^2_{Nagelkerke} = 0.01$ ], nor did managerial innovation act as an antecedent of any profile. For that reason, they are absent from Table 3.

## 5 Discussion

The delegation practice was the only one that acted as an antecedent, with a positive perception, of profiles 2 and 4, with profile 3 (moderate) standing out, while it acted as an antecedent, in a negative way, for profile 1 (uncommitted). This result is consistent with other studies, for example some from the international arena, which have discussed the concept of bottom-up innovation, in which innovations by workers at different hierarchical levels and not only from the top tier are perceived (Saari et al., 2015; Tierney et al., 2019). Bottom-up innovation relates with decentralization, autonomy, and workers' freedom. The result is also consistent with studies that point to the relationship between OC and practices close to the concept of delegation. In a study of volunteers, Freire et al. (2013) highlighted a correlation between affective commitment and so-called high involvement work systems (people management policies that stimulate group decision making and involvement with the organization's strategic questions). In a study of a medium-sized Portuguese information technology company, Rodrigues and Veloso (2013) demonstrated that autonomy and freedom stimulated innovation processes, and that these factors are associated with worker commitment.

It is highlighted that, not only for the technical civil servants but also for the outsourced staff, there was predictive power of the delegation practice, possibly due to the fact that the outsourced staff in the study worked in administrative areas, with more possibilities for autonomy and freedom in their everyday work, as

Table 3  
Models of the organizational commitment profiles

Profile	Predictors	B	SE	Wald	p	OR	OR	
							Inf.	Sup.
Profile 1	Delegation	-0.76	0.16	21.94	0.00	0.47	0.34	0.64
	Recruitment and retention	-0.43	0.17	6.17	0.01	0.65	0.46	0.91
Profile 2	Delegation	0.66	0.14	23.59	0.00	1.93	1.48	2.52
	Recruitment and retention	0.25	0.13	4.01	0.05	1.29	1.01	1.65
Profile 3	Delegation	0.67	0.24	7.99	0.00	1.95	1.23	3.09

B = non-standardized beta of regression; SE = standard error; Wald = Wald test; p = statistical significance; OR = odds ratio; Inf. and Sup. OR = confidence intervals above and below 90% of the odds ratio.

opposed to outsourced staff working in operational areas, such as cleaning and maintenance.

The recruitment and retention practice, in turn, acted as an antecedent of profile 1 (uncommitted) and of profile 2 (combined affective-continuance committed), where, similarly to the delegation practice, it acted in a negative way in relation to profile 1 (uncommitted). Considering recruitment first, it is inferred that in the context of federal universities there is value placed on entering via a public contest, despite the legal limitations in the form of contest execution, for example the application of objective and impersonal exams. The aforementioned value placed on entering via a contest may help to explain why recruitment worked as an antecedent, in a positive way, of one of the commitment profiles. On the other hand, factors related to retention may also explain the result that highlighted the recruitment and retention practice as an antecedent, such as the attractiveness of the career plan and trajectory of administrative technical public servants (which predicts five classification levels – relating to the level of the role, from A to E – with each classification level featuring four levels of training, achieved after training carried out by the employee), and the incentive for qualifications (a financial incentive given to employees who prove they have a formal educational level higher than that required for the role they occupy) (Brasil, 2005).

Despite this not being the most attractive plan in the federal sphere, it features significant advantages when compared to various private initiative opportunities (higher salaries and less workload), as well as the value of the stability obtained after the probationary stage. It is necessary to highlight that the recruitment and retention practice did not apply to the outsourced staff, since they did not answer items relating to the practice, considering that aspects related to recruitment and retention apply to the hiring company and not to the universe in which they act.

Unlike what was verified for the delegation and recruitment and retention practices, it was not possible to identify predictive power on the part of the tangible and intangible incentives and training practices in relation to the OC profiles. First, the tangible and intangible incentives practice is analyzed. The fact that the tangible incentives (remuneration and benefits) practice did not work as a predictor of the profiles may be explained by the reduced emphasis on the employee's performance in the context of public higher education institutions

(Bandeira et al., 2017). In addition, the mode of financial reward of public HEIs is based, primarily, on progressions with predetermined times and not on a competences or performance evaluation model with a focus on competences and well-defined and precise targets.

Based on these results, it follows that while the career plan of the public sector and public HEIs attracts candidates, after joining the public service there is probably a more critical evaluation regarding the mode of financial reward. That is, the same Career Plan for Administrative Technical Public Servants in Education (Brasil, 2005), which attracts candidates, when compared to the conditions of various private organizations, also has limitations, for example the progressions through training, which sometimes occur without the indication of topics based on a survey of needs for development or focused on competences.

With regard to the result relating to intangible incentives (stimulation of teamwork, job rotation, and attribution of commissions), in turn, it is perceived that, in the context of many public organizations and also in HEIs, rigid criteria are frequently established for changes of activity sectors. There are also cultural and organizational barriers to the promotion of constant dialogue and the building of projects with employees from different areas.

The training practice also did not act as a predictor of the OC profiles, which may be explained based on Loureiro et al. (2017), who indicated that the training given to the occupants of key roles in public universities is insufficient, and that there are flaws in managers' training and a feeling of uncertainty in relation to the continuity of the work, on the part of various technicians, due to the transience of managements. There are also data that demonstrate flaws and important challenges in the area of training for public HEIs, highlighting the insufficiency and/or lack of an indication of training in the probationary stage, which affects the employee's performance, and the need to update the mapping of competences and for an improvement policy in public HEIs, the implementation of a methodology for evaluating results derived from training, and the adoption of certain training as a pre-requisite for occupying management posts (Tomazzoni et al., 2017).

Besides the studies mentioned, practical limitations are observed in the New National Policy for People Development (Brasil, 2019). Despite the notorious importance of the aforementioned policy, it is observed that its implementation sometimes occurs in a bureaucratic and/or rigid way, which is to some extent

expected when dealing with public resources. For example, the legislation generally foresees short-duration training and leave for training approximately a year in advance, as well as requirements and procedures such as the publishing of internal notices and availability to release employees, considering the active workforce. If on one hand these questions demonstrate care and rigor in the procedures that involve public resources, they may also set wider and procedural actions for employee development.

It is highlighted that, not only for the technical civil servants, but also for the outsourced staff, there was no predictive power of the training practice, which may be explained by the fact that the legislation generally foresees training only for public servants. Outsourced workers generally have reduced access to training tools, both on the part of the hiring companies and on the part of the organizations in which they work, an aspect that is intensified by their “dual relationship” with the two organizations, in which the responsibility for their training is diluted between the two institutions (Chambel, 2012).

In light of these results and discussion, it is indicated that hypothesis 3 ( $H_3$ , *PMP focused on innovation act as antecedents of profiles characterized by different dominances of the affective, normative, and continuance dimensions and do not act as antecedents of uncommitted profiles*) was partially confirmed, since only the delegation and recruitment and retention practices acted as antecedents of the profiles. In addition, the partial confirmation is due to the fact that there are low indices of the normative dimension in the profiles found.

Profile 4 (*affectively committed*) did not form part of the valid regression models. On the other hand, the profiles with combinations of dimensions formed part of the regression models. This result may be explained based on the study of Meyer and Parfyonova (2010), in which it is indicated that combinations of different commitment dimensions may configure a motivating force, enabling positive organizational results.

After the analysis of each practice, it is indicated that MI did not act as a predictor of the commitment profiles, which indicates that hypothesis 2 ( $H_2$ , *MI acts as an antecedent of profiles characterized by different dominances of the affective, normative, and continuance dimensions and does not act as an antecedent of uncommitted profiles*) was refuted, which may be explained based on a number reasons: specific characteristics of the public sector and higher education institutions and characteristics and challenges faced by managers that work in these environments.

Regarding the public sector, it is necessary to consider the immobility caused by the legislation that governs the sector, which often limits the emergence of innovation, as well as the presence of questions relating to the tradition and excess of bureaucracy in various public organizations (Bandeira et al., 2017). In addition, innovation in public organizations, according to Matos and Nunes (2016), is sometimes neglected or adopted in a fragmented way, due to various factors, such as scarcity of resources, political influence, and reduced pressure on the part of key users of public services. Similarly, Montenegro et al. (2021) and Brandão and Bruno-Faria (2013) highlight that innovation is not yet fully disseminated in the Brazilian public sector and, when it occurs, it tends to adopt the private sector as a reference.

With regard to public higher education institutions, these contain major complexity at the social and structural level and strong hybridism, with characteristics such as diversification of areas of activity, of the public served, and of the nature of the actions and activities, as well as bureaucratic compulsion, excessive rules, corporatism, resistance to change, rigidity, and functional immobility (Falqueto & Farias, 2013). Fernandes et al. (2016) indicate that in highly complex environments there may be difficulties for the emergence of MI, which may explain the result that indicates that MI did not behave as an antecedent of commitment. Palacios (2014) points to factors that limit the innovation potential in public HEIs: “coercive isomorphism” (related to laws, beliefs, and values) and “normative isomorphism” (linked to the degree of interdependence between departments) (p. 212), causing structural immobility. Ribeiro (2017) also indicates that in universities there is a continuous impasse, in that context, between “adopting the new and conserving the old” (p. 365).

Also in the discussion relating to MI, the challenges faced by managers in this field, such as a lack of expertise in administrative activities, a low level of training for exercising management functions, and a lack of time to focus on management due to an excess of bureaucratic activities, may explain the result found (Gomes et al., 2013; Pereira et al., 2015). Janissek et al. (2017b, p. 57) also indicate that in such environments there is a significant gap between the “attribution of importance of management practices to define an innovative university and the effective adoption of them in the context in which the managers are embedded.” Considering that leadership plays a central role in the implementation

and consolidation of innovation, these questions may limit the consolidation of MI in public HEIs. All the factors mentioned may be limiting factors both in the perception of MI and in the association between this and the form of the worker's psychological bond with the organization (OC).

Based on these results, the following theoretical contributions of the study emerge. One of the contributions is the exploration of the person-centered approach, through the use of the latent profile analysis technique, which is more sophisticated than cluster analysis, used in previous studies (Bandeira et al., 2000; Medeiros et al., 1999). It is also highlighted that different combinations of bonds were identified in the sample studied. Another contribution of this study is the verification that certain people management practices focused on innovation act as antecedents of some of the profiles identified, including outsourced staff. In addition, the study highlighted the emergence of a specific factorial structure of the PMP focused on innovation scale in the context studied.

## 6 Concluding remarks

This study aimed to investigate the impact of MI and PMP focused on innovation on OC profiles. The objective was achieved, with theoretical and practical contributions. In the field of OC, this study enabled us to verify the three-dimensional structure of the construct and outline OC profiles within the Brazilian context, providing a more dynamic overview of the connection. In the field of PMP focused on innovation and MI, in turn, it was possible to verify a distant factorial structure from the original scale, with delegation, recruitment and retention, training, and tangible and intangible incentive practices, which may indicate challenges in the communication practice of public organizations.

It was also possible to verify the predictive power of two practices, delegation and recruitment and retention, in relation to certain OC profiles, which generated relevant discussions for public organizations. The predictive power of delegation, which applied to public servants and outsourced staff, enabled us to conclude that some PMP to some extent reached outsourced workers. The other practices, training and tangible and intangible incentives, did not present predictive power in relation to the OC profiles, which could be the focus of management attention, primarily in terms of investments in training and intangible incentives, given the difficulties of promoting

alterations in terms of remuneration and benefits in the public sector.

MI, in turn, did not act as an antecedent of the profiles. In certain organizational contexts there may be the perception of certain PMP focused on innovation and there may not necessarily be the consolidation of processes related to MI, as discussed by Becker and Huselid (2006), when indicating that MI is embedded in a context of complex relationships that involve the organization's strategy and the adoption of PMP. The authors highlight that PMP focused on innovation can contribute to the emergence of long-term managerial innovations. These results may also be explained based on the presence of traditional practices in the public sector, which does not invalidate the possibility of encouragement of such practices and of more significant managerial attention to the possibility of managerial innovations in public organizations.

In general, some results are consistent with those of other studies that demonstrate that the introduction of innovative people management practices is one of the predictors of commitment (Agarwala, 2003; Ceylan, 2013). On the other hand, the study provides innovative results, involving the theoretical contributions to the field: those relating to the factorial structure of PMP focused on innovation, the emergence of OC profiles, and the testing of certain practices with outsourced staff in public organizations.

With regard to the contributions to the managerial field, this study offers support for the implementation and/or improvements of certain people management practices in public higher education institutions, which can favor certain organizational commitment profiles of workers from different categories in such spaces: public servants and outsourced staff. Managers working in these public organizations could promote the strengthening of certain practices, focusing efforts on certain managerial actions, contributing to the psychological bonds of different workers.

Regarding the limitations, there is the sample size, which generated less representative profiles than others, as well as the research being conducted in only two universities. Challenges were recorded in the data collection from managers and outsourced workers. As suggestions for future studies, we recommend studies on commitment profiles in other public organizations and comparisons with private organizations; qualitative studies on such



phenomena; and research that investigates mediating or moderating variables using constructs investigated here.

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#### Financial support:

We are grateful to the National Council for Scientific and Technological Development (CNPq) for its help and financial support given to this research.

#### Open Science:

Montenegro, Adauto de Vasconcelos; Pinho, Ana Paula Moreno; Tupinambá, Antonio Caubi Ribeiro, 2022, "Supplementary Data - Práticas de Gestão de Pessoas, Inovação Gerencial e Perfis de Comprometimento Organizacional", <https://doi.org/10.7910/DVN/OONJ5B>, Harvard Dataverse, V1.

#### Conflicts of interest:

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