

**INFLUENCE OF ROLE CONFLICTS AND SOCIAL RELATIONS ON THE
AUTONOMY OF THE PROFESSOR-MANAGER**

WESLEY MARCOS DE ALMEIDA

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO PARANÁ (PUCPR)

SIRLEY TEREZINHA FILIPAK

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO PARANÁ (PUCPR)

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1. INTRODUCTION

Higher education has undergone profound transformations in different regions of the world, driven by both internal dynamics and external pressures, which compel it to adopt management practices increasingly aligned with the precepts of efficiency and quality. In this context, Higher Education Institutions (HEIs) are challenged to respond to the demands of a globalized economy, which requires not only the training of qualified professionals but also the capacity for continuous innovation and adaptation (Meyer Jr., Meyer, & Rocha, 2009) The traditional conception of management, often focused on hierarchical and bureaucratic models, has been revisited to accommodate the inherent complexity of the academic environment, where the mobilization of the competence and energy of collectively organized people is fundamental for the achievement of educational objectives (Lück, 2011)

The role of educational management, with so much responsibility and pressure from opposing forces, is sometimes performed by professors who accumulate roles beyond teaching, from research, guidance, and even management. The accumulated exercise of such different roles, in a context as complex as higher education, requires constant reflection on the practices involved in their actions.

The conflict between the roles they occupy and the social networks in which the professor-manager operates guides the study, under the orientation of the following research problem: how do the power and authority relations established in the HEI environment influence the autonomy of the professor in the role of manager? To answer the research problem, the objective was defined as evaluating the impact of role conflicts and formal and informal relations on the autonomy of the professor-manager. The relevance of this study lies in the in-depth understanding of the dynamics that affect the management capacity of professors in HEIs, contributing to the development of strategies that promote greater autonomy and effectiveness in their functions.

2. THEORETICAL FRAMEWORK

The understanding of management dynamics in Higher Education Institutions (HEIs) requires a robust theoretical foundation that encompasses organizational management models and the complex power and influence relationships permeating the academic environment. This theoretical framework aims to consolidate the conceptual bases supporting the analysis of the professor-manager's autonomy, integrating perspectives on the nature of management, managerial roles, power relations, and the importance of social networks.

2.1 Management in the Context of Higher Education

Higher education, as highlighted by Meyer Jr.; Meyer; Rocha (2009), operates under the increasing pressure of a globalized environment, which demands from universities not only the formation of human capital but also the capacity for innovation and adaptation to market demands. This reality imposes a revision of the very concept of management, which, according to Lück (2011), should be understood as a process of mobilizing the competence and energy of collectively organized people for the achievement of educational objectives. Andrade (2002) complements this view by stating that management strategies vary according to the beliefs, values, and styles of each HEI, emphasizing the uniqueness of the academic context.

According to Andrade (2002), the strategies adopted for management vary according to the beliefs, values, and management styles and are unique to each HEI. Bertucci (1999) notes that decision-makers (managers) act as intermediaries between the environment and the organization, depending on their ability to understand and articulate organizational units.

2.2 Managerial Roles and Mintzberg's Perspective

The performance of the professor-manager can be understood in light of management models, particularly Henry Mintzberg's (2010) perspective. The author moved away from Fayol's idea of management, which defines it as control, or Porter's idea of analysis. The model proposed by Mintzberg (2010) is generic and applies to any management function, regardless of the organization's characteristics or hierarchical level. Differences found in the manager's practice explain the inability to generalize and reduce it to a single management structure.

Mintzberg's (2010) work starts from an important premise: management as practice, without being contrary to the idea of management as science or as a profession. In this sense, scientific knowledge would not guarantee effectiveness. In this sense, the model proposed by Mintzberg (2010), which is also the result of the evolution of his studies since the 1970s, presents managerial roles grouped into three categories:

- **Informational Roles:** Include the monitor (seeks and receives information), the disseminator (transmits information within the organization), and the spokesperson (transmits information outside the organization). In these roles, the manager acts in communication and control of information flow, both formal and informal.
- **Interpersonal Roles:** Cover the figurehead (symbolic leader), the leader (motivates and directs subordinates), and the liaison (maintains external contact networks). These roles involve leadership and linking, influencing the desire to work and interpersonal relationships.
- **Decisional Roles:** Comprise the entrepreneur (initiates and supervises new projects), the disturbance handler (takes corrective actions in crises), the resource allocator (distributes resources), and the negotiator (represents the organization in negotiations). In the decision-making process, the manager plays an active role in internal and external relations.

According to Mintzberg (2010), it is as a negotiator with other areas and with the external environment that the manager performs a more operational function. But it is in this role that their authority is most required, directly influencing the quality of the results obtained by management. Furthermore, according to the author, only the balanced

performance of the different roles enables the practice of management. Recent case studies, such as those by Moraes (2013), Ferreira (2011), and Amaral (2018), corroborate the increasing complexity of the roles and responsibilities of professor-managers, often distancing them from the main teaching function and directing them towards a more managerial perspective.

2.3 Autonomy and Role Conflict

Autonomy is a complex topic for any manager. In this study, autonomy is understood as the reflection of authority in the degree of freedom the professional has to manage their routines and make their decision (Andrade, 2002) (Cervigicele & Souza, 2013). However, the degree of freedom in educational management is constantly limited by external components, such as economic expectations (Bourdieu, 2007; Charlot, 2007; Peroni, 2012; Brasil, 1996) and internal components, expressed by a large network formed from a complex system of hierarchies, groups, and social relations (Mintzberg, 2010; Cervigicele & Souza, 2013; Turíbio & Santos, 2017).

Role conflict arises when the professor-manager accumulates teaching and administrative functions, generating tensions between the demands and expectations of each role. This overload of responsibilities, in an environment as complex as higher education, requires constant reflection on the practices involved in the manager's actions.

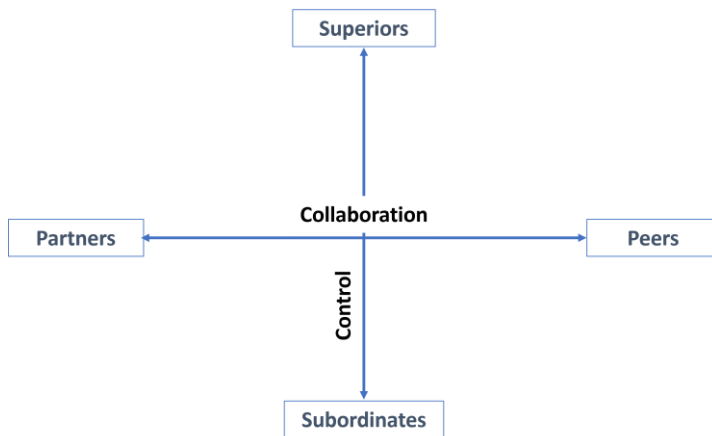
2.4 Power Relations and Social Networks

Power and influence relations are crucial elements for understanding organizational dynamics. According to Marteleto (2010), social networks form a set of individuals who unite resources and ideas of common interests, constituting spaces where the interaction among actors allows for collective construction, collaboration, and the sharing of ideas of common interests of the social group. Borgatti, Everett, and Johnson (2013) list some application areas where social network analysis (SNA) could bring advantages. These include leadership, job performance, entrepreneurship, stakeholder relations, knowledge use, innovation, profit maximization, and inter-company collaboration.

According to Mintzberg (1983, p. 4), power can be defined as “simply the capacity to effect (or affect) organizational outcomes,” while authority would result as “a subset of power, but in this case formal power, power vested in the position, the ability to get things done by virtue of the position held.” Furthermore, according to Mintzberg, influence would be confused with power, to the point where influence would occur through the exercise of power. Far beyond the organizational chart or the alignment in which power and influence are distributed within the organization, the formal structures that support organizational charts are unable to reflect the flow of real influences within organizations.

It is worth highlighting what Mintzberg (2010) calls a relationship network formed by vertical and horizontal relationships (Figure 1). Following the formal vertical structure, directly superior managers and support teams immediately below in the organizational chart would be the formal contact alternatives when it is necessary to resort to daily problems faced by the manager, as they represent control relationships. Complementarily, colleagues and peers, as well as internal and external partners, make up the collaboration network.

Figure 1 - Vertical and horizontal relationships in management



Source: Adapted from Mintzberg (2010)

3. METHOD

The transformations in Brazilian HEIs reflect tensions between democratic management and managerial practices, especially in the differences between public and private HEIs and between universities, university centers, federal institutes, and colleges. These structural and organizational distinctions demand methodological care in treating the heterogeneities present in the field, as highlighted by Charlot (2007) and Peroni (2012).

3.1 Type and Research Approach

This study adopted a mixed methodological approach, of an exploratory and interpretive nature, aiming to deepen the understanding of the influence of role conflicts and formal and informal relationships on the autonomy of professor-managers in Higher Education Institutions (HEIs). The choice of a mixed approach is justified by the need to integrate quantitative and qualitative data, providing a comprehensive and multifaceted view of the investigated phenomenon (Bardin, 2011).

To follow the proposed path, the adopted method is critical and dialogical hermeneutics (Gadamer, 2007; Ricoeur, 2008), based on the interpretation of narratives collected in semi-structured interviews, allowing to explore the meanings of professor-managers' perceptions about their autonomy and the social relationships in which they are inserted. This approach complemented quantitative techniques by highlighting the subjective and qualitative aspects of power and autonomy relations.

3.2 Population and Sample

Regarding the universe of interviewees and HEIs, the sample consisted of HEIs from different academic organizations (universities, university centers, colleges, and federal institutes) and administrative categories (public and private), located in the State of Paraná/PR, as well as professors who act as managers in these HEIs. According to the survey carried out with microdata from the 2020 Higher Education Census, 54 HEIs offer at least one undergraduate course in the in-person modality in Curitiba-PR. The 54 HEIs operating in Curitiba were ordered according to the number of enrolled students. Considering the calculation of the average number of enrolled students in these HEIs (494

students) as an inclusion criterion, HEIs with a number of enrolled students higher than the average were selected, totaling 22 HEIs in the sample.

The sample, composed of 22 HEIs, covered public and private categories and varied academic organizations (universities, university centers, colleges, and federal institutes). To address this heterogeneity, the analyses compared the results according to administrative and organizational categories, identifying significant patterns and differences. The data collection for the 22 selected HEIs was carried out from open data available in a digital environment (official HEI website), from April to May 2022. It considered as management positions functions that, regardless of the organizational chart or number of courses and students, grouped into some common profiles: Rectorate or General Directorate; Pro-Rectorate; Area/Sector Directorate; Advisory; Undergraduate Coordination; Lato Sensu Coordination; Stricto Sensu Coordination. The survey resulted in the identification of 793 professors, distributed in different management functions, in the 22 HEIs surveyed.

3.3 Data Collection Instruments and Procedures

Data collection was carried out through primary and secondary sources, from April to May 2022 for documentary data and from September to November 2022 for interviews. The instruments used were:

- **Documentary Analysis:** Survey of open data available on the official websites of the 22 selected HEIs. This stage aimed to collect information about the organizational structure and management positions, considering functions that grouped into common profiles, regardless of the specific organizational chart of each HEI.
- **Semi-structured Interviews:** Applied to participating professor-managers. The instrument was distributed electronically to the 628 professor-managers identified with a public email. The questions addressed the perceived level of autonomy, the reasons that limit it, the routine of accountability, and the support relationships in the contact network. The discursive responses were fundamental for qualitative analysis.

3.4 Data Analysis Techniques

The analysis of the collected data occurred from December 2022 to January 2023, employing a combination of quantitative and qualitative techniques:

- **Descriptive Analysis:** Used to characterize the sample of HEIs and participants, as well as to present quantitative data on the level of autonomy and accountability. Microsoft Excel software was used for this purpose.
- **Content Analysis:** According to Bardin (2011), this technique was applied to the discursive responses from the semi-structured interviews. The process involved pre-analysis, material exploration, results treatment, inference, and interpretation. Responses were categorized into context units, such as: Collegiate decisions; Internal/external regulation; Budget; Bureaucracy; Centralized decisions; and, Low authority. Microsoft Excel software was used for organizing and counting occurrences.

- **Social Network Analysis (SNA):** Based on Freeman's (1996) principles, SNA was applied to map formal and informal relationships among professor-managers and their support networks. This technique allowed identifying actors (nodes), relationships (edges), and connection criteria, revealing the dynamics of influence and power. Measures of density, centrality (closeness and betweenness), and power (Bonacich) were calculated to characterize the network structure.

The methodological triangulation, combining descriptive analysis, content analysis, and SNA, allowed for a deeper and validated understanding of the findings, by integrating different perspectives on the autonomy of professor-managers and power relations in the academic environment.

4. ANALYSIS AND DISCUSSION

This section presents the research results, critically analyzing them and confronting them with the established theoretical framework. The discussion addresses the autonomy of the professor-manager, power and influence relations, and the dynamics of social networks in the environment of Higher Education Institutions (HEIs).

4.1 Autonomy of the Professor-Manager: Perceptions and Limiters

In the study, the degree of autonomy was expressed in a question with a Likert scale ranging from total autonomy to no autonomy. Of the sample, 106 professors answered the question and classified their level of pedagogical, administrative, and financial autonomy: 11.3% as total; 69.8% as partial/relative; 17.9% as little, and 0.9% as none. It is worth noting that the autonomy level variable did not show a significant difference in relation to the administrative category (sig = 0.803) and academic organization (sig = 0.145), using the Chi-square test. In addition to classifying the level of autonomy, respondents were asked to detail the reasons that limit it (in cases where they do not have total autonomy). The reasons that limit autonomy were categorized from the content analysis (Bardin, 2011) of the participants' responses. The main limiters identified were:

- **Collegiate decisions:** cases where autonomy is limited by the need for participation in decisions;
- **Internal/external regulation:** autonomy is limited by internal and external regulations and legislation;
- **Budget:** autonomy is limited by financial and budgetary restrictions;
- **Bureaucracy:** autonomy is limited by an excess of restrictive and bureaucratic processes and procedures;
- **Centralized decisions:** autonomy is limited by the excessive force of the organizational chart and centralization of decisions in higher instances;
- **Low authority:** autonomy is limited by the lack of authority and/or representativeness of the manager before their peers.

Table 1 shows the count of the occurrence of limiters grouped by code (reason), also distributed by organization and category of the HEI in which they operate. As can be seen in Table 1, only the codes for collegiate decisions and bureaucracy showed a significant

difference when compared with the category of the HEI in which they operate. For all other relationships, the interpretation should be purely descriptive.

Table 1 - Relationship of other functions performed by respondents

Organization / Category	Collegiate decisions	Internal and external regulation	Budget	Bureaucracy	Centralized decisions	Low authority
University Center	1	2	6	2	6	2
Private	1	2	6	2	6	2
College			1		2	
Private			1		2	
Federal Institute	2			2	3	
Public	2			2	3	
University	12	16	18	20	12	5
Private	2	8	10	6	7	2
Public	10	8	8	14	5	3
Total	15	18	25	24	23	7
X ² Category	0.014	0.946	0.191	0.012	0.344	0.963
X ² Organization	0.219	0.200	0.463	0.170	0.236	0.735

Source: the author, 2024.

First, it is important to relativize the reasons themselves (represented by codes). Although all may represent a limitation to the total autonomy of the professor-manager, they can be classified according to their impact on their action. Collegiate decisions restrict autonomy; however, this limit can be seen as an enrichment of the decision-making process by allowing participation. Regulation and budget are considered neutral, as they are inherent components of any organization, including HEIs, as argued by Mintzberg (1995). Bureaucratic codes, centralized decisions, and low authority, on the other hand, are seen as detractors. The detractor codes (bureaucracy, centralized decisions, and low authority) represent 48.2% of the listed reasons, while the positive code (collegiate decisions) represents 13.4% of the reasons listed as limiters of autonomy.

The confrontation of these findings with the theory reveals a tension between the search for managerial efficiency and the maintenance of democratic principles. The prevalence of limiters such as bureaucracy and centralized decisions corroborates the view that HEIs, even in the academic context, are subject to pressures that lead them to adopt managerialist practices (Meyer Jr.; Meyer; Rocha, 2009; Moraes, 2013; Ferreira, 2011; Amaral, 2018). The autonomy of the professor-manager is, therefore, curtailed by structures that privilege control and resource rationalization, often to the detriment of flexibility and individual decision-making capacity. This aligns with the perspective of Bourdieu (2007) and Charlot (2020) on the economic expectations that influence education, and with Peroni (2012) on financial and legal pressures (Brasil, 1996). Evaluating the cases where there is a significant difference between public and private HEIs, the clear superiority in the number of autonomy limiters arising from collegiate participation (sig = 0.014) and excess bureaucracy (sig = 0.012) in the performance of the professor-manager in

public HEIs stands out. Tables 2 and 3 show the responses sent by the professors and classified as collegiate decisions and bureaucracy.

The participants' responses related to these two codes help to corroborate the perception of the quality of the codes. The comments in Table 2 demonstrate the awareness that the existence of a collegiate body and participatory decisions, although they limit the manager's action, have a positive impact on the quality of the decisions made. This finding resonates with previous studies (Carvalho, 2011; Gonçalves, 2021; Pacheco et al., 2019) that point to the complexity of decision-making processes in public institutions and the difficulty of reconciling democratic management with managerial demands.

Table 2 - Relationship of autonomy limiters classified as collegiate decisions

Category	Comment
Private	I have autonomy in decision-making, but they are supported by the nuclei. (Respondent 127)
Private	The limitation is due to external (MEC) or internal guidelines that need to be respected. Authority is not exercised in any other way than collaboratively with the group so that everyone feels they are participants in the processes. (Respondent 46)
Public	I depend too much on collegiate decisions. (Respondent 65)
Public	As a Course Coordinator, autonomy is partial due to the necessary discussion in the collegiate body and the teaching direction in decisions related to calendars, opening of classes, and others. (Respondent 56)
Public	At [...] we have several representative bodies, elected by the school community. Macro and institutional decisions are made by these bodies. Then they reach the teaching direction, which has the task of passing on the decisions made to us so that we can make the necessary adjustments for their implementation. We have autonomy, within the course collegiate bodies, in how we will make these implementations, but they need to be implemented. (Respondent 97)
Public	Autonomy is limited by collegiate decisions and the research and postgraduate board. (Respondent 33)
Public	Financial autonomy is limited due to the determinations of superiors (pro-rectors and MEC) regarding the mode of budget execution. Administrative autonomy is partial, as all decisions depend on the approval of collegiate bodies, so the manager is a mediator between administrative and pedagogical processes. In addition, the manager does not have the freedom to choose or hire specific employees in the necessary quantity to meet the needs of the administrative unit. Pedagogical autonomy is the one present among the options presented. (Respondent 38)
Public	Few resources and defined deadlines to spend. Limited to what exists in the bidding process. Authority is minimal, I act through commissions and by defining goals for the group. (Respondent 111)
Public	Depending on the decision and cooperation of other administrative units. (Respondent 64)
Public	The course management is shared with the course collegiate body, which jointly discusses the decisions to be made in the course, always seeking the horizontality of relationships. (Respondent 45)
Public	In the position of coordinator, I see myself more as an interlocutor between the Pro-Rectory of Postgraduate Studies or the Directorate of Postgraduate Studies and the Program's Faculty, receiving and passing on information, giving due course to documents, and ensuring that the rules are followed. I am not exactly an authority, but rather the final word, which must be supported by the program's rules. If the

	interpretation is ambiguous, the final word goes to the collegiate body. (Respondent 95)
Private	It is a shared management. I represent the course at events and meetings. (Respondent 66)
Public	As a course coordinator, I have the autonomy to propose projects and solutions, but I always need the approval of the course collegiate body, and sometimes of higher collegiate bodies (department, sector, etc.). (Respondent 57)
Public	Autonomy is relative in relation to financial resources. The sector's budget has to be spent within certain rubrics and according to the available bidding. My authority is exercised through dialogue, meetings, assemblies, and collegiate decisions. (Respondent 35)
Public	The course is "governed" by a Collegiate where many decisions are deliberated and voted on. (Respondent 99)

Source: the author, 2024.

The differences in the performance of collegiate bodies, as well as the idea that their participation has a proportional relationship with the exercise of autonomy, goes against what Turibio and Santos (2017) understood as the role of participatory spaces: a creative, democratic, and emancipatory reform of the public university as an alternative to face neoliberal pressures. The comments in Table 3 show how bureaucracy limits autonomy and, more than that, negatively impacts decision-making capacity.

Table 3 - Relationship of autonomy limiters classified as bureaucracy

Category	Comment
Private	Restricted to many processes (Respondent 116)
Private	We do not have autonomy as coordinators because we are a private HEI and all issues involve the financial department, which we do not have access to or influence over. We exercise authority as mediators, in fact, following the orders of superiors and mediating difficulties and processes. (Respondent 92)
Private	Very restricted to processes. (Respondent 87)
Private	What limits autonomy is the lack of continuing education. And the lack of effective academic systems. Lack of democratic principles of institutional management and strategies of this democracy in management. The fact of being a woman has greater interference from superiors. (Respondent 101)
Private	internal bureaucracy. humanized authority. (Respondent 55)
Private	Autonomy is limited by institutional policies, established processes, budgetary limitations, and systems. (Respondent 34)
Private	What most often hinders autonomy are bureaucratic issues and an excess of division of labor between areas. I believe that authority is exercised through service to other colleagues. (Respondent 103)
Private	change of management limits autonomy, different views of the implemented processes that were running normally until the moment of the change and imposition of changes in the management flow (Respondent 84)
Private	I have limitations from the areas directly responsible for the processes, whether it be financial control, academic direction, etc. But I have total freedom within an autonomy guided by the institutional strategic planning. (Respondent 132)
Public	Bureaucratic rules and lack of funds limit. I have no authority. I am a collaborator, a colleague. (Respondent 114)
Public	The level of autonomy is often limited by issues of restrictive regulations; limitations of the coordination function; academic processes and bureaucracy; limitations of the

	academic system. (Respondent 100)
Public	Bureaucratic limitations (Respondent 79)
Public	The bureaucracy. (Respondent 41)
Public	The bureaucratic processes in the exercise of management are a major obstacle. I can't always do what I would like, nor how/when I intend to. (Respondent 108)
Public	Autonomy is limited by the bureaucracy that the public system imposes. (Respondent 32)
Public	Extremely bureaucratic structure. Political interests of senior managers with excessive centralization and the need to analyze everything. I have been overruled by the senior manager a few times. (Respondent 70)
Public	Very bureaucratic system full of rules. Rules that are not always clear. (Respondent 120)
Public	We have established rules and standards. the standards or rules do not always meet the new developments and challenges we have in management. (Respondent 124)
Public	I can, after a bit of a struggle, finish administrative tasks. Bureaucracy and organizational charts that are not disclosed and/or difficult to understand limit me. I exercise it by showing firmness and knowledge. (Respondent 60)
Public	I miss autonomy in some issues that would make students' academic life easier, such as problems with registration on the website. The decisions of the collegiate body are generally respected by other colleagues, but some professors want to make individual decisions and clash with the coordination (regarding the number of vacancies, "punishment" of students in relation to grades and activities, etc.) (Respondent 119)
Public	The two main limiting factors are: (i) scarcity of resources; (ii) bureaucracy in the administrative processes inherent to public management. (Respondent 106)
Public	A lot of bureaucracy, increasingly complicated and limited because it is a public institution. (Respondent 85)
Public	Operational decisions have great autonomy, bureaucratic decisions have very low autonomy (Respondent 63)
Public	Relative autonomy due to the university's regulations and the bureaucratic management in the public service. Authority is exercised democratically, by consulting colleagues, but aiming to meet the established regulations. (Respondent 53)

Source: the author, 2024.

The verticalization of decisions, centralization of management, and decentralization of actions, marks of the business vision, seen by Turibio and Santos (2017) as an aggressor to the educational and social performance of the HEI and seen by Mintzberg (2010) as an inherent characteristic of social networks, is felt by the respondents as bureaucracy. Whether in public or private HEIs, the excess of bureaucracy strongly limits the capacity for action and decision-making of managers, reducing the role of the professor-manager to that of an operator/operational.

4.2 Accountability and Quality of Relationships

A crucial characteristic in the manager's performance is linked to the routine and structure of accountability, in addition to understanding the impact on the decision-making process. Respondents were asked (discursive/open question) to indicate whether they are accountable for their performance as managers, as well as to indicate to whom (function) they are accountable and the quality of these relationships. The question had 104 responses, and 91.3% of the respondents stated that they have to be regularly accountable. The identification of accountability was converted into a new variable (Yes/No) which,

submitted to the X² test, did not show a significant difference when compared with the category (sig = 0.989) and the organization (0.726) of the HEI. In order to improve the ability to analyze the collected data, the identification of the people/functions that are accountable, contained in the responses, were interpreted and classified using the coding: Peers; Superior; Rectory; External. Table 4 shows the synthesis of the occurrence of accountability, as well as the identification of the hierarchies created from the coding. As the variables did not show a significant difference between the different organizations and only two of them (Peers and Superior) showed significance when related to the category of the HEI, the data in the table below can be descriptive.

Table 4 - Occurrence and hierarchy of accountability grouped by organization and category of the HEI

Academic organization	Administrative category	Accountable		Hierarchy in accountability			
		Yes	No	Peers	Superior	Rectory	External
University	Public	37	3	14	18	13	4
	Private	32	2	0	22	14	1
	Total	69	5	14	40	27	5
University Center	Public	0	0	0	0	0	0
	Private	15	2	1	10	8	0
	Total	15	2	1	10	8	0
College	Public	0	0	0	0	0	0
	Private	6	1	1	3	3	0
	Total	6	1	1	3	3	0
Federal Institute	Public	5	1	3	1	1	0
	Private	0	0	0	0	0	0
	Total	5	1	3	1	1	0
Total	Public	42	4	17	19	14	4
	Private	53	5	2	35	25	1
Total General		95	9	19	54	39	5
X ² Category		0.989		0.000	0.050	0.185	0.099
X ² Organization		0.726		0.117	0.299	0.595	0.546

Source: the author, 2024.

According to the data in the table above, 91.3% of the respondents stated that they need to be accountable for their actions and decisions to one (or more) hierarchical level. Of these, 18.3% are accountable to their peers or collegiate bodies, 51.9% to the immediate senior management, 37.5% to the top management of the HEI, and 4.8% to governmental or class bodies.

Accountability directed to peers and direct superiors showed a significant difference when related to the category of the HEI in which they operate (sig = 0.000 and 0.050). Although the proportion of respondents is distributed in 44.2% from public and 55.8% from private, among those who are accountable to their peers, 89.5% work in public institutions. Among those who are accountable to direct superiors, 64.8% work in private institutions. These significant differences corroborate the idea that the manager's performance influenced by peers (more participatory decision) has more prevalence in public

institutions. The performance influenced by direct managers (more authoritarian decision) has a greater prevalence in private HEIs.

The content of the responses to the question about accountability was also evaluated to identify the quality of the highlighted relationships. The content of the responses of the 95 respondents who stated that they are accountable was analyzed and classified using the scale: Excellent/Great (n=16), Good/Open (n=22), Reasonable/Calm/Formal (n=8), Poor/Limited (n=5), Terrible/Destructive (n=0), or Not evaluated/Inconclusive (n=44).

Table 5 - Relationship of quality indicators of the relationship classified as poor/limited

Category	Quality of accountability
Private	Very limited relationship (Respondent 92)
Private	The relationship with my superiors is not good, it is limited (Respondent 49)
Private	At this time of management change, a conflicting relationship. From my professional experience, until then the relationship with managers has always been very close and professional. (Respondent 84)
Public	The relationship is cordial, there is little involvement of colleagues in decision-making and planning. I don't believe it's a lack of incentive, but overload and lack of motivation. (Respondent 71)
Public	The relationship with the collegiate body is delicate, since people who are not aware of the procedures lightly raise questions about the coordinator's actions (Respondent 95)

Source: the author, 2024.

In the text of the responses classified as poor (Table 5), two main complaints are identified: in private HEIs, the biggest complaint is the excessive restriction of autonomy; in public institutions, the complaint is the limitation of authority due to problems with colleagues and teams where they act as managers. The findings corroborate those found in the case study conducted with UFSC, UDESC, and FURB (Herek, 2014), in which the excessive need for accountability puts managers in an uncomfortable position, sometimes leaving aside the interests of the community and society in favor of the financial survival of the HEI.

4.3 Power and Influence Relations in Social Networks

The mapping of the contact network of the professor-managers participating in the study considered the areas/functions they use as a support network, and which they effectively contact, in the course of their routine activities. The initial idea was to evaluate whether the formal structure (immediate management above or support team below) would be prioritized in the conduct of management routines, or if informal alternatives would emerge in the survey.

Table 6 summarizes all indications of a support network (contacts) of the professor-managers, including the criterion in the choice of activation. The prevalence of indications of network connections made by undergraduate course coordinators is in accordance with the sample size (74.3% of respondents and 73.7% of indications).

Table 6 - Frequency of the contact network for support grouped by function and choice criterion

Function	Support network	Choice criterion						
		Friends hip/	Academic	Professional	Strength of the	Third-party recommend	Other	Total

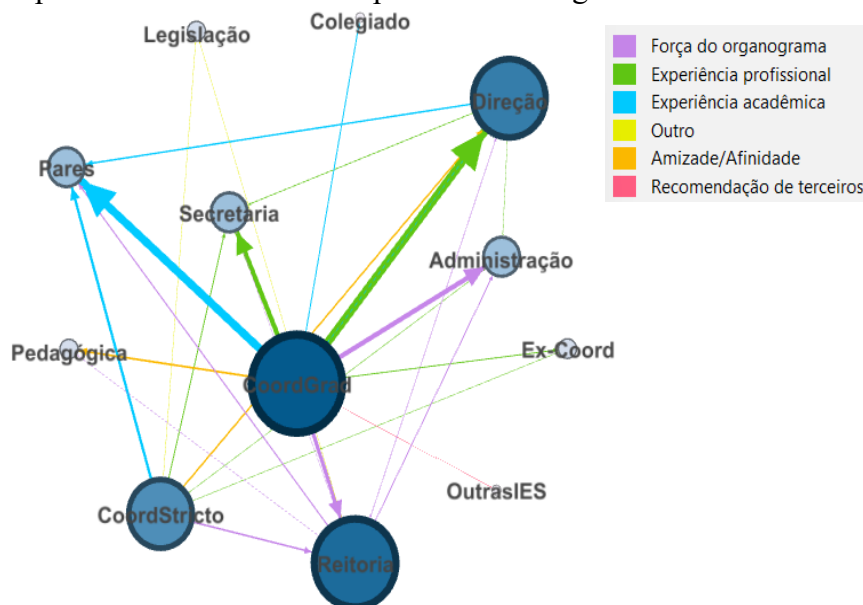
		Affinity	experie nce	experien ce	organizati onal chart	ation		
Undergraduate Coordination	Advisory/Admini stration		2	10	24		1	37
	Pedagogical Advisory/Assista nce	2	3	3	6			14
	Collegiate/Class Council/NDE		2	1	1		3	7
	Sector direction	2	6	22	36	1		67
	Ex-Coordinator		1	5				6
	Peers/Colleagues	16	24	21	4			65
	Professionals from other institutions					1		1
	Rectory		4	5	20			29
	Secretariat/Suppo rt Team		1	23	12		2	38
	Total	20	43	90	103	2	6	264
Stricto Coordination	Advisory/Admini stration			2				2
	Sector direction	1			10			11
	Ex-Coordinator			2				2
	Internal/External Legislation						1	1
	Peers/Colleagues	4	6	9			1	20
	Rectory	1	1	2	8			12
	Secretariat/Suppo rt Team	1	1	2	2			6
Total	7	8	17	20		2	54	
Sector direction	Advisory/Admini stration			1				1
	Undergraduate Coordination		1					1
	Peers/Colleagues		2	1			8	11
	Rectory			1	2			3
	Secretariat/Suppo rt Team			4				4
	Total		3	7	2		8	20
Rectory	Advisory/Admini stration		2		4			6
	Pedagogical Advisory/Assista nce				1			1
	Sector direction		1		2			3
	Internal/External Legislation						1	1
	Peers/Colleagues		1	1	5	1		8
	Secretariat/Suppo rt Team				1			1
	Total		4	1	13	1	1	20
Total General		27	58	115	138	3	17	358
		7.5%	16.2%	32.1%	38.5%	0.8%	4.7 %	

Source: the author, 2024.

The criterion used for the contact decision when there is a need for support is noteworthy. While 38.5% of the indications were adopted according to the formal structure (strength of the organizational chart), 48.3% take into account academic or professional experience. 7.5% distance themselves even further from the formal structure by adopting a criterion of affinity or friendship in the decision to use the support structure. This prevalence of informal criteria in the choice of the support network suggests that, on a day-to-day basis, professor-managers seek solutions and support from sources that offer them greater trust and effectiveness, regardless of their hierarchical position.

Next are the graphs that express the social networks formed from the collected data, and that the graphical visualization of the data from Table 6. The graphs of the contact network (Graph 1, 2, 3, 4, and 5 of the original article) visually illustrate this dynamic, including the actors (nodes), the relationships (edges), and the criteria (color of the edges).

Graph 1 - Contact network of professor-managers



Source: the author, 2024.

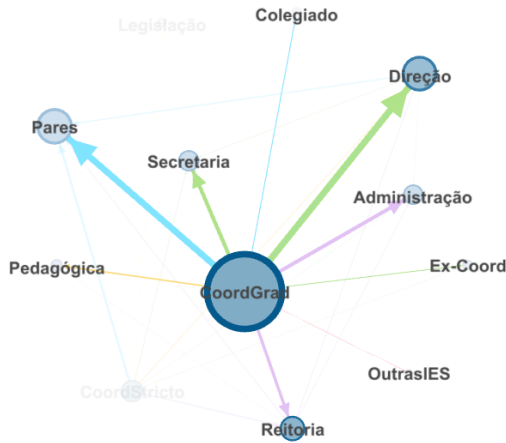
The network shows the general behavior of the relationships, including the color of the edges, which indicates the most common (frequent) criterion in the relationship between the two nodes. As the size of the nodes indicates the degree of entry and exit, the superiority of undergraduate course coordinators in the number of times they activate other actors is evident, but they are rarely activated. Stricto sensu coordinators, on the other hand, activate other actors, but are not activated. The managers of the directorate and rectory are moderate and it is clear that they activate as well as are activated in the network.

Considering power and authority relations, as well as the influence networks formed (Mintzberg, 1983; 2010), the form of the connections exercised from the strength of the authority exercised by the position/function is evident, but the strength of the influences exercised by informal power relations, motivated by academic, professional, or friendship ties, cannot be disregarded.

Graph 2 - Contact network of professor-

Graph 3 - Contact network of professor-

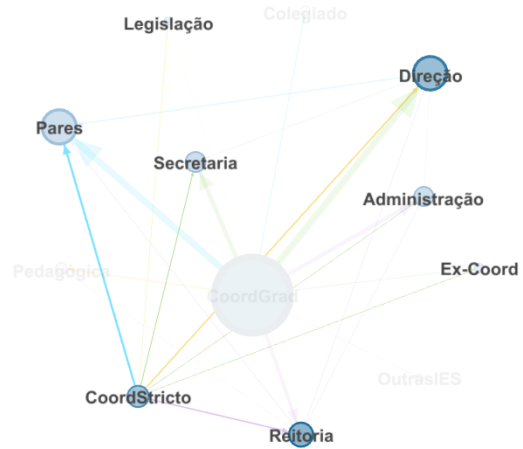
managers who act as undergraduate coordinators



Source: the author, 2024.

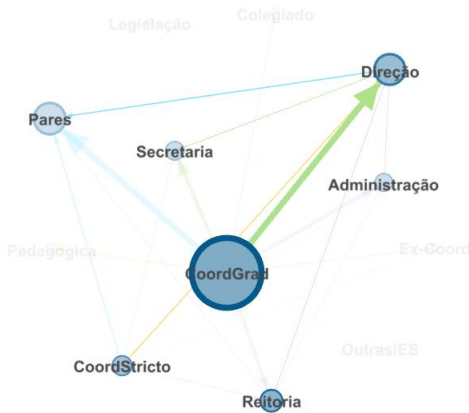
Graph 4 - Contact network of professor-managers who act as sector/center directors

managers who act as stricto sensu coordinators

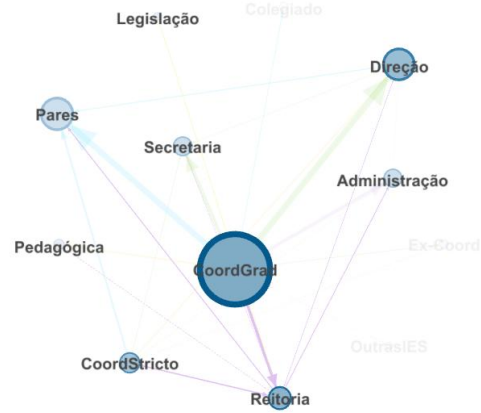


Source: the author, 2024.

Graph 5 - Contact network of professor-managers who act in rectorial functions



Source: the author, 2024.



Source: the author, 2024.

Undergraduate course coordinators, for example, prioritize their peers for their academic experience and their immediate managers for their professional experience, before resorting to members of the rectorial for the strength of the organizational chart. Stricto sensu postgraduate coordinators, in turn, prioritize their peers for their professional experience. This preference for horizontal and informal relationships, especially among peers, demonstrates the prevalence of informal power in the performance of these coordinators, according to Mintzberg's theory (1983).

In contrast, managers in directorate or rectorial functions show a prioritization of formal and vertical relationships, following the indications of the organizational chart and exercising formal authority (Mintzberg, 1983). However, even at the top of the structure, in case of need, these managers also privilege access to their peers and colleagues, reinforcing the importance of informal networks at all hierarchical levels. Table 7 shows the summary of measures calculated from the social network built above.

Table 7 – Measures of density, centrality, and power of the influence network

Actor	Code in the network	Weighted degree	Closeness	Harmonic	Betweenness	Bonaccini power
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				closeness		
Undergraduate Coordination	CoordGrad	265	0.909	0.95	0.077	2.478
Stricto Coordination	CoordStricto	54	0.647	0.788	0	2.374
Sector direction	Direção	101	0.667	0.75	0.064	0.414
Rectory	Reitoria	64	0.588	0.75	0.032	0.227
Advisory/Administration	Administração	46	0	0	0	0
Pedagogical Advisory/Assistance	Pedagógica	15	0	0	0	0
Collegiate/Class Council/NDE	Colegiado	7	0	0	0	0
Ex-Coordinator	Ex-Coord	8	0	0	0	0
Internal/External Legislation	Legislação	2	0	0	0	0
Peers/Colleagues	Pares	104	0	0	0	0
Professionals from other institutions	OutrasIES	1	0	0	0	0
Secretariat/Support Team	Secretaria	49	0	0	0	0

Source: the author, 2024.

The most activated actors were the undergraduate course coordinators (265), followed by peers and colleagues (104) and department or sector directors (101). The overall density is 20.5%, that is, among all possible connections, only a portion is effectively used by the actors that make up the contact network. The closeness measure (Closeness) showed the superiority of undergraduate coordinators in the use of the contact network for the execution of their activities (0.909). The betweenness measure (Betweenness) highlighted undergraduate coordinators as the most intermediary actors in the network (0.077), followed by directors (0.064), while stricto coordinators demonstrate a lower ability to act as mediators. The power measure (Bonacich) indicated that, despite not acting as intermediaries, stricto sensu coordinators, along with undergraduate coordinators, are the most influential actors in the contact network.

Content analysis (Bardin, 2011) identified patterns in the managers' discourses related to autonomy and role conflicts. These findings were triangulated with the power networks mapped through social network analysis (SNA), allowing for the exploration of informal and formal influence dynamics, according to Mintzberg's models (1983; 2010).

Universities have the highest level of complexity in their organizational structure, with more chains of authority and, consequently, which could bring more support alternatives in moments when the manager needs it. University centers and federal institutes, on the other hand, require less legal complexity (considering requirements related to academic organization) and, therefore, have a leaner structure. While colleges, by focusing, generally, on teaching activities, require an even leaner structure.

However, regardless of the academic organization, comparing the results of the network with typical organizational charts, some discrepancies become evident:

- Undergraduate course coordinators prefer to resort to their colleagues and peers before resorting to the structure directly linked to the course they coordinate (secretariat, technical support team, and members of the collegiate or NDE);

- Similar to undergraduate coordinators, stricto coordinators privilege their colleagues and peers when they need to resort, but unlike undergraduate, collegiate bodies are not even mentioned among the alternatives;
- Sector, center, department, and/or unit directors are activated (by coordinators) more frequently than they resort to help. However, when resorting to their support network, they privilege their peers and colleagues over their own direct managers (rectory), support teams, or administrative or pedagogical advisory structures offered by the HEI;
- Logically, because they are at the top of the structure, managers in a function associated with the rectory (or pro-rectors) are activated more than they activate the network, but, in case of need, like the others, they privilege access to their peers and colleagues.

The sum of activations, whether using the vertical and formal structure or the horizontal and informal structure, forms the support network used by professor-managers. Therefore, the quality of the relationships will influence the quality of the result in the manager's function.

4.4 Conflict between Expectations and Reality

The respondents were also asked about the level of alignment between the institutional expectations for the function they perform and the reality of day-to-day management. Of the 106 professors who answered the question, 39.6% indicated some type of divergence in this alignment. Among the divergences indicated by the professors, one was related to the lack of autonomy by Respondent 77, "There is always a divergence because we expect to be able to act with more autonomy, and there are institutional obstacles," and another to the excess of autonomy by Respondent 65, "the central administration delegates too many decisions to the coordinators." Some respondents identified a certain level of error, or even incompetence, in the performance of senior management:

[...] I notice that my superiors do not have an assertive knowledge about the daily actions of the coordination, only an intuition of the basic activities that the coordinator performs (Respondent 94)

[...] conflicts with anti-democratic strategies and in the face of institutional limits of systems and lack of a policy of continuing education (Respondent 101)

I believe that the management is a little complacent. There is no time to think about improving what we do because there is always something big happening (Respondent 39)

The respondents identify serious obstacles that distance the institutional expectation from practice. The excess of bureaucracy in the routines is harmful, as indicated by Respondent 44, "Bureaucracies prevent greater growth, so I could deliver more," or:

There are divergences because the institution expects something much more strategic from the Course Coordinator, but we have so much bureaucratic demand and so much rework that this takes a back seat (Respondent 77)

[...] there are divergences in relation to the time spent on the management activity, many meetings, many processes, a lot of bureaucratization, little autonomy and independence in decision-making (Respondent 118)

Our day-to-day reality is one of many bureaucratic activities, which often prevents us from advancing in relation to thinking about the course, pedagogical activities, etc. (Respondent 65)

Associated with the problem of excess bureaucracy, the main (most popular) reason for the distance between expectations and reality is located in the disproportionate focus on operational activities, as highlighted by Respondent 46, “The role of ‘coordinating’ is not that of ‘executing’,” or even by Respondent 52, “I act more as a qualified secretary than as a manager,” a position shared by other respondents

The Pro-Rectorate of undergraduate studies assigns to the course coordinators tasks that it could perform itself or that another nucleus in the university could perform, such as the competition nucleus (Respondent 33)

There is an excess of operational activities, probably due to the lack of sufficient technicians in the institution’s staff (Respondent 78)

[...] I need to teach classes, manage a laboratory, supervise internships, master’s, doctorate, scientific initiation, do extension. There is no way to deliver quality in everything (Respondent 127)

The excessive focus on operational routines acts to the detriment of managerial and strategic requirements, as highlighted by Respondent 55, “A lot of work in guiding students. It steals time from strategic actions,” or even

Expectation - planning the course and developing the new PPC. Reality - bogged down in the commitments and problems that appear on a day-to-day basis (Respondent 81)

The bureaucratic load is very high, leaving little energy for strategic actions that depend on the collaboration of commission members (Respondent 31)

This pessimistic view of managers about their activities does not correspond to the view defended by Cervigicele and Souza (2013), in which the educational manager has the role of creating and sustaining an environment conducive to discussion with the different levels, listening to opinions, following up on requests, delegating responsibility, and integrating people. As we see in the opinion of the respondents, this performance, to a certain extent “glamorous,” does not stumble upon the routine and tireless tasks.

The analysis and discussion of the results reveal that the autonomy of the professor-manager is a complex construct, influenced by structural, organizational, and relational factors. The tensions between democratic management and managerialist practices, the prevalence of informal networks over formal ones for daily support, and the disparity between expectations and operational reality are crucial elements that shape the performance of these professionals in the higher education environment.

5. FINAL CONSIDERATIONS

This study aimed to analyze the influence of role conflicts and formal and informal relationships on the autonomy of professor-managers in Higher Education Institutions (HEIs). The findings reveal a complex scenario, where the autonomy of these professionals is frequently limited by centralizing and bureaucratic organizational structures, and their authority is diminished by colleagues and collegiate members. The research evidenced the awareness of undergraduate course coordinators about the subjectivization of their activities and the systematic valorization of operational tasks to the detriment of strategic actions.

One of the main contributions of this study lies in the methodological triangulation, which allowed mapping the organizational dynamics and power relations that impact the autonomy of professor-managers. The combination of content analysis with Social Network Analysis (SNA) provided an in-depth understanding of how centralizing structures and informal networks coexist, often in a conflicting manner. The research demonstrated that,

although the rigidity of the organizational chart formally establishes hierarchies, on a daily basis, the support of colleagues and peers is prioritized, and the strength of the organizational chart is frequently replaced by academic and professional experience when deciding whom to resort to.

The study also contributes by highlighting the specific limitations for different categories of HEIs, especially the differences between public and private institutions regarding the perception of collegiate bodies and the impact of bureaucracy. The detailed analysis of autonomy limiters and the quality of accountability relationships offers valuable insights for managers and educational policymakers, who can use this data to rethink university management structures and processes.

5.1 Research Limitations

Despite its contributions, this study presents some limitations. The sample of HEIs and professor-managers, although representative of the Curitiba region, may not be generalizable to the entire Brazilian context, given regional and institutional particularities. The dependence on self-reported data in semi-structured interviews may introduce perception biases. Furthermore, the analysis of social networks was based on the participants' own indications, which may not capture the totality of informal interactions and influences.

5.2 Suggestions for Future Research

Based on the findings and limitations, several possibilities for future research can enrich the field of management in Higher Education:

- **In-depth Case Studies:** Conduct case studies in specific HEIs, applying the proposed logic to a smaller sample, to increase the level of detail of social network relationships within the institution. This would allow for a more granular analysis of internal power and influence dynamics.
- **Information and Knowledge Networks:** Investigate how information and knowledge networks are formed in HEIs and how the movements of these networks influence the actions of professor-managers. Understanding the flow of information and the sharing of knowledge can reveal new ways to optimize management.
- **Promotion of Formal Participation:** Based on the findings related to the limitation of autonomy and authority of the professor-manager, seek to understand and, more than that, discover ways to promote the formal participation of actors such as collegiate members and Structuring Teaching Nucleus (NDE). This could involve the development of more participatory and effective management models.
- **Continuing Education Policies:** Rethink continuing education policies and the organizational structures of HEIs, promoting a greater balance between autonomy and control. Future studies could explore the effectiveness of different professional development programs for professor-managers.

The role of the professor-manager is a fertile field for research, given its complexity and its relevance to the quality of higher education. This study offers a starting point for

future investigations, contributing to the advancement of knowledge about university management and to the improvement of managerial practices in the academic context.

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