

Controllers' Role and Controller's Role in Organizations: Perception of Graduates of Accounting Sciences

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ABSTRACT

The demand for professionals prepared to assume strategic positions such as that of controller makes it fundamental that concepts and attributions proper to the function are known by future professionals who will exercise them. In this way, this study aims to verify the students' perception in Accounting Sciences about the responsibilities of Controllership and the role of the Controller in organizations. For this, the definitions and attributions pertinent to the area of control were defined as Borineli (2006). The data, collected from 233 undergraduate students of accounting sciences from 10 universities in Santa Catarina, were evaluated through descriptive linear regression analysis and statistical techniques such as mean analysis, Kruskal-Wallis test of independent samples and non-parametric test sample. The results indicated that there is agreement that the control functions are related to operational activities. However, higher averages were found in the issues that related control to more strategic management activities. This indicates that there is already a perception on the part of undergraduates in the accounting sciences that the controllership has assumed an increasingly strategic position in the organizations.

1 Introduction

The role of controllership, initially associated only with accounting functions, has been assuming an increasingly strategic position in organizations (Calijuri, Santos & Santos, 2005; Lunkes, Machada, Rosa, & Telles, 2011; Lourensi & Beuren, 2011).

Responsibilities such as the simulation of future scenarios, the development of predictive models, the recognition of potential businesses (Calijuri et al., 2005), as well as the active participation in the development of the company's strategic planning (Lunkes, 2011). This ascension of activity, however, makes it fundamental that concepts and attributions proper to the function are

known by the professionals who perform it (Lourensi & Beuren, 2011).

The demand for professionals prepared to assume strategic positions such as that of controller requires that Higher Education Institutions (IES) monitor and attend to this evolution of the function, contemplating in their pedagogical projects and curricular matrices, contents that will make future professionals able to contribute in the process of decision-making and not just technical executors (Castelo, Albuquerque, Peter, Machado, & Rodrigues, 2011). It is necessary that graduates recognize this new status of the function and feel secure to participate effectively in decisions that involve, besides the patrimonial, financial and economic reality of the organization (Figueiredo &

Caggiano, 1997), long-term guidelines.

In addition to these implications, the divergent views of researchers in the field (Borinelli, 2006; Lunkes, Gasparetto & Schnorrenberger, 2010) contribute to the inconsistency of the literature on the subject. While some classify controllership as a managerial support function, others understand it as an accounting function for external purposes (Borinelli, 2006). These conceptual dissonances contribute to the already frequent trade-off between the theory advocated in the academy and the practice adopted in the organizational daily life, making future professionals unprepared or confused about their attributions in the labor market.

Because it is an area with emergent and comprehensive attributions, it is understandable, according to Borinelli (2006), which the inherent functions of the controlling position may vary according to the characteristics of each organization. However, it is imperative that common baseline principles guide the area.

From this perspective, which relates the efficient performance of the controller to his knowledge of the concepts and attributions inherent in the area of controllership, the following research question is raised: What is the perception of the accounting sciences undergraduates about the attributions pertinent to the Controllership area and about the role of the controller in organizations?

Knowing the functions of the controller is a fundamental requirement in studies on the controller theme (Lunkes et al., 2010). It is hoped that the findings of this research may contribute to the discussions aimed at solving the conceptual dissonance regarding control, both in academia and in the labor market.

It is known that this is an area of knowledge composed of multidisciplinary knowledge's, most of which are in the disciplines of accounting sciences (Amaral & Rodrigues, 2006). The very legal status of the accountant profession, coupled with familiarity with accounting reports and statements, makes the graduates and graduates of accounting sciences the main public to choose the area of controllability to act (Martin, 2002). In this way, studying the understanding and conceptions of the students of this course becomes relevant.

2 Literature Review

Controllership has reached new status in the corporate management process. Initially responsible only for the preparation of financial statements (Figueredo & Caggiano, 1997), the area began to assume more strategic responsibilities in organizations (Lourensi & Beuren, 2011).

Much of this rise is due to the more complex organizational arrangements unleashed by globalization. Mergers, incorporations, joint ventures and alliances, as well as the expansion of upstream and downstream productive chains, have increased the need for control in organizations, provoking changes in the control functions (Calijuri et al., 2005).

In Brazil, the entry of multinational companies introduced new theories and accounting practices capable of serving users from different countries, also collaborating so that the controllership reached a new level (Amaral & Rodrigues, 2006).

However, the recent increase in the responsibilities of controllership has not yet allowed concepts and attributions relevant to the area to reach consensus (Borinelli, 2006), generating in the future professionals and ignorance about the real responsibilities that they will assume in the labor market.

For Mosimann and Fisch (1999) the controller can assume two positions, that of administrative organ with processes defined by the administration; and that of the field of knowledge, based on foundations and methods of diverse sciences. Complementarily, Beuren (2002) emphasizes that, as an administrative body, the controller has the function of staff, providing advice to managers, based on information regarding the performance of all sectors.

Peleias (2002), on the other hand, believes that the control is more autonomous, being able to even be responsible for decisions that permeate the organizational processes. Martin (2002) understands that in addition to the internal attributions, it is the responsibility of the controller to satisfy stakeholders, such as clients / users and investors / shareholders, gathering information simultaneously and in a balanced way. Chagas and Bonzanini (2003) point out that the more traditional literature perceives control as a staff organ, and the proponents of the GECON system (Catelli, 2001) define it as a line organ capable of managing the company's information flow. In a

more holistic way, Figueiredo and Caggiano (2004) attribute to the controllership the coordination of the different areas of the company so that together they achieve a greater performance than they would reach in isolation.

Borinelli (2006, p.135) attributes to the area of control the functions: "accounting, managerial-strategic, costs, tax, information management, protection and internal control of assets and risks." Already, for Padoveze (2009) it is the responsibility of the controller to demonstrate the performance of organizations through the control and management of information. Lunkes et al. (2011), in turn, affirm that, in addition to managing the information, the controller also participates actively in the strategic planning process.

As for the specific role of the controller, it is expected, according to Figueredo and Caggiano (1997), that this act as head of organizational accounting, taking responsibility for the management of formal financial information. To assume such a function, the controller needs to be skilled in financial statements and transaction processes (Roehl-Anderson & Bragg, 2004).

Faced with this multiplicity of tasks, it is essential that qualified professionals with a solid academic background, capable of attending to the demands and organizational challenges, and competent to participate in the strategic management of companies (Oro, Beuren & Carpes, 2014).

The Federal Council of Education itself, based on Resolution CNE / CES 10 of December 16, 2004, recognized this need and determined that the discipline of Controllership should be integrated into the curricula of the higher course of Accounting Sciences, ratifying the importance of discipline in training of future accounting professionals.

Aware of the importance of consolidating the literature on controllability, several researchers have already proposed to define their attributions and identify the skills and competencies required for the exercise of the function (Borinelli, 2006; Amaral & Rodrigues, 2006; Grande & Beuren, 2008; Carvalho Júnior & Rocha, 2009; Lunkes et al., 2010; Paiva & Facci, 2014; Araújo, Callado & Cavalcanti, 2014; Gomes, Souza & Lunkes, 2014).

Amaral and Rodrigues (2006) sought to relate the functions exercised by the controllers with the theory recommended in courses of specialization in accounting sciences, in Paraná.

After questioning and interviewing coordinators and teachers of the courses, they verified that there is a significant correlation between the theory of the classroom and the practice of the organizations.

Carvalho Júnior and Rocha (2009) aimed to map the Brazilian researches in search of the different definitions proposed by the researchers to the controller theme. In the 36 analyzed articles, they identified that there is no conceptual uniqueness regarding the term control, however, there is a linkage of the term control to three basic perspectives: administrative organ, human knowledge area and managerial function.

Lunkes et al. (2010) argue that controllership is an area lacking consolidated concepts and attributions. Therefore, they proposed to compare the functions relevant to the area in three countries. The findings indicated that the attributions most cited were those for the preparation and interpretation of reports, followed by the planning and control functions and accounting, respectively, showing that, in practice, the controllership still performs quite informative functions, but has been expanding its activities for purposes more strategic in organizations.

Paiva and Facci (2014) sought to identify the content addressed in the discipline of accounting in courses in accounting sciences of some HEIs in the state of Paraná. They verified that there is the interest of all in providing to the students, concepts and basic attributions of the area of control and still relate them to aspects of organizational management. However, they verified that there is no uniqueness between the HEIs in relation to the topics covered, nor compliance with the specific contents and the workload allocated to work on the subject of control.

Araújo et al. (2014) sought to identify the skills and competences developed in specialization courses with emphasis on controllability, relating them to the profile propagated in the literature on the professional controller. Therefore, they applied a questionnaire to students of MBA's in the city of João Pessoa / PB. They verified that the skills most worked in the courses were the financial, accounting and economic skills, as well as the skills associated with the strategic planning of the organizations.

Gomes et al., (2014) analyzed ads published on professional recruitment sites to identify the professional profile of the controlling profession required by Brazilian organizations. They found

that companies require trained professionals, preferably in accounting sciences, who have knowledge of IT and international accounting. They also want professionals to present characteristics such as: leadership, proactivity, analytical capacity and that participate in management in a systematic way.

2.1 Studies Related to the Adopted Research Model

Among the studies that verified the conceptual discrepancy pertinent to the area of control, Borinelli's thesis (2006) was highlighted for having discussed the definitions and attributions in a systematized way. Identifying the lack of consensus in the literature related to controllership and the role of controller in organizations, the author set out to systematize knowledge about controllability in three perspectives: conceptual, procedural and organizational.

Initially, the author presents a definition of controller, based on the theoretical survey carried out. Controllership, according to Borinelli (2006, p.105) "is a set of knowledge that constitute theoretical and conceptual bases of operational, economic, financial and patrimonial orders related to the control of the organizational management process." Then, also based on the literature, the author summarizes the attributions pertinent to the controller, linking them to the peculiar functions of the area. Finally, it analyzes the distribution of activities and functions in the various organizational sectors.

Other studies supported their objectives in the conceptual, procedural and organizational perspectives proposed by Borinelli (2006), such as: Grande and Beuren (2008); Lourensi and Beuren (2011).

Grande and Beuren (2008) used the control perspectives suggested by Borinelli (2006) to identify the approaches related to the topic in national books. As a result, they verified that the controller, as an area of knowledge, is little explored in Brazilian books. The focus of the national works is on the attributions of the area of control, especially those related to information management processes and costs.

Lourensi and Beuren (2011) used the three perspectives proposed by Borinelli (2006) to analyze the insertion of the controller in the theses defended in the FEA / USP doctorate between 1997

and 2006. They verified that, regarding the conceptual, procedural and organizational aspects, the controller has a weak and insignificant insertion in the analyzed theses.

3 Methodology

The method is characterized as quantitative, both in the mode of information collection, and in the treatment of them by means of statistical techniques (Hair Jr. et al., 2009) and descriptive analysis. In this study, we sought to verify the students' perception in Accounting Sciences about the responsibilities of Controllability and the role of Controller in organizations.

As for the data collection instrument, the conceptual, procedural and organizational perspectives proposed by Borinelli (2006) were used as a basis. The instrument consisted of 47 questions divided into 4 dimensions, using the Likert 7-point measurement scale, with a variance between 1, for totally disagree, and 7, I totally agree. Table 1 presents the dimensions and indicators used in this study.

In addition to the questions that comprised the four dimensions, the questionnaire had 6 questions related to the profile of the respondents, such as: Gender; Age; Educational institution; Semester the student is taking; if you have already attended or are studying the discipline of controller and if the student works in the area of controller.

The structured questionnaire was made available via Google Docs and in printed version to the professors of 10 Higher Education Institutions (IES), so that they could pass on to the students of Accounting Sciences who were studying or had already taken the Controlling course. It should be emphasized that HEIs were represented by codes (IES 1, IES 2, IES N) for the preservation of their names. The data collection period occurred between July and September 2014 and was attended by 233 respondents. The data obtained were tabulated in Microsoft Excel® software.

The questions were grouped to the dimensions described in Table 1. Each dimension reached an average corresponding to the sum of the answers of the questions, divided by size and per respondent and divided by the number of questions of each dimension of the questionnaire. The Microsoft Excel® spreadsheet database was imported into the SPSS® Version 22 Statistical Software.

The first analysis performed was the reliability test (Cronbach's Alpha). This indicator is a measure of reliability ranging from 0 to 1, with values from 0.60 to 0.70 estimated as minimum acceptability limits (Hair Jr. et al., 2009). Afterwards, statistical techniques were performed: linear regression, mean analysis, Kruskal-Wallis test of independent samples and nonparametric independent sample test.

Table 1. Controlling dimensions and indicators in organizations

Dimension 1: Primary Attribution of Controllership	
D1Q1	Maintain accounting records of company transactions.
D1Q2	Carry out the equity control (fixed assets).
D1Q3	Consolidate the financial statements.
D1Q4	Prepare the financial statements.
D1Q5	Disclose the accounting information.
D1Q6	Carry out an analysis of the company's financial statements.
D1Q7	Check, bookkeeping and collect taxes.
D1Q8	Guide the units regarding taxes.
D1Q9	Elaborate the Tax Planning.
D1Q10	Perform internal control.
D1Q11	Perform internal audit.
D1Q12	Hire and manage insurance.
D1Q13	Apply and raise financial resources (financial and treasury management).
D1Q14	Perform financial controls.
D1Q15	Perform and control cash flow.
D1Q16	Make control of payments to be made (accounts payable).
D1Q17	Conduct feasibility studies of projects.
D1Q18	Exercise Management Accounting.
D1Q19	Manage IT infrastructure for information systems.
D1Q20	Manage information systems (except IT).
D1Q21	Acting as a system user.
Dimension 2: Primordial Assignment of the Controller of an Organization	
D2Q22	Relate to shareholders, investors and owners.
D2Q23	Relate to government.
D2Q24	Relate to tax authorities.
D2Q25	Relate to external audit.
D2Q26	Relate to class entities.
D2Q27	Relate to financial institutions.
D2Q28	Relate to suppliers.
D2Q29	Relate to customers.
Dimension 3: Controlling Activities and Functions Related to the Management Process	
D3Q30	Participate in the process of elaboration of Strategic Planning.
D3Q31	Participate in the control of Strategic Planning
D3Q32	Participate in the process of preparing the Tactical Planning.

D3Q33	Participate in the process of control of Tactical Planning.
D3Q34	Participate in the process of preparing the Budget.
D3Q35	Participate in the budget control process.
D3Q36	Participate in the process of external environmental analysis.
D3Q37	Participate in the process of internal environmental analysis.
D3Q38	Participate in the performance appraisal process.
D3Q39	Participate in the process of measuring management costs.
D3Q40	Participate in the management transfer pricing process.
D3Q41	Participate in the process of setting the selling price.
D3Q42	Participate in the Tax Planning process.
Dimension 4: Posture of Controllership in Organizations	
D4Q43	Advisory.
D4Q44	Consulting.
D4Q45	Controllership.
D4Q46	Audit.
D4Q47	Internal spokesperson of the High Administration.

Source: Adapted from Borinelli (2006).

4 Analyses

In this chapter the results of the research are presented and interpreted. The first analysis was that of reliability (Cronbach's alpha), according to Table 1. Regarding the reliability indicator (Cronbach's alpha) all values were higher than 0.7, indicating good data reliability (HAIR JR. et al., 2009).

Table 1. Reliability Analysis

Dimensions	Cronbach alpha
Dimension 1	0,90
Dimension 2	0,85
Dimension 3	0,86
Dimension 4	0,71

Source: Survey data.

Then, in Tables 2 and 2.1, a descriptive analysis was carried out regarding the profile of the respondents, covering questions such as: gender, age, HEI that studies, the semester that is taking, if already attended or is studying the discipline of controller and if the student works in the area of controller.

Table 2. Profile of students

Gender (%)	
Female	Male
56%	44%
Age (years in %)	
18-28	85%
29-39	12,4%
40-50	1,3%
51-61	9%
Above 61	4%
HEI (%)	Semester
HEI 1	12,4% 1° Sem.= 4%
HEI 2	3% 2° Sem.= 3%
HEI 3	10,3% 3° Sem.= 4%
HEI 4	20,5% 4° Sem.= 0%
HEI 5	2,6% 5° Sem.= 0%
HEI 6	12% 6° Sem.= 4,3%
HEI 7	1,3% 7° Sem.= 12,8%
HEI 8	6% 8° Sem.= 65,4%
HEI 9	18,8% 9° Sem.= 13,7%
HEI 10	13,2% 10° Sem.= 0%

Source: Survey data.

Table 2.1. Student's profile

About Controlling discipline	(%)
You are taking this semester.	34,2%
Already gone	51,7%
He studied the Controlling theme within another course discipline.	13,7%
Works in the Controllership Area	(%)
Yes	10,3%
No	89,7%

Source: Survey data.

It can be seen from Table 2 that the majority (56%) of the students is female and 18 to 28 years old (85%). As for the participating HEIs, the ones that had the greatest participation (respondent students) were HEIs 4 (20.5%) and HEIs 9 (18.8%), and those with the lowest participation were HEIs 5 (2.6%) and IES 2 (3%). With regard to Controllership, 51.7% answered that they have already attended, 34.2% are studying in this semester (2014/2) and 13.7% have not studied, but have already studied the subject in other courses offered in the Science course Accounting.

In the sequence, the students separated by HEIs were correlated with each dimension proposed in the questionnaire (D1 - Primordial Attribution of Controllership, D2 - Primordial Attribution of Controller of an Organization, D3 - Controllership Activities and Functions Relating to the Management Process, D4 - Posture of Controllership in Organizations).

Then, the students who had already studied, those who were studying and those who had

studied the subject of control in another discipline with the 4 dimensions proposed were listed. Finally, students who worked and those who did not work in the area of control were related to the 4 dimensions proposed. Finally, the Kruskal-Wallis test of independent samples was applied, presented in Table 3

Tabela 3. Kruskal-Wallis tests of independent samples

Dimensions	Institutions of Higher Education (HEI)	
	Kruskal-Wallis tests	
	Sig.	Decision
D1	,087	Hold null hypothesis
D2	,460	Hold null hypothesis
D3	,030	Reject null hypothesis
D4	,273	Hold null hypothesis
Dimensions	Have you studied or are studying the discipline of Controlling	
	Kruskal-Wallis tests	
	Sig.	Decision
D1	,189	Hold null hypothesis
D2	,639	Hold null hypothesis
D3	,633	Hold null hypothesis
D4	,249	Hold null hypothesis
Dimensions	Work or not work in the controller area	
	Kruskal-Wallis tests	
	Sig.	Decision
D1	,207	Hold null hypothesis
D2	,442	Hold null hypothesis
D3	,651	Hold null hypothesis
D4	,182	Hold null hypothesis

* Asymptotic significance

Source: Survey data.

According to Table 3, after performing the Kruskal-Wallis test of independent samples, it was observed that the only dimension that presented significant difference, according to Koufteros (1999) at the level of 0.05, among HEIs was Dimension 3 that refers to perception of the students about the activities and functions related to the management process in the organizations, in this way, the null hypothesis dealing with the equality of averages in relation to Dimension 3 between Universities was rejected. The averages of Dimension 3 as well as the standard deviations for each HEI are presented in Table 4.

Tabela 4. HEIs and Functions in the Management Process

HEI	Dimension 3	
	Mean	Standard deviation
HEI 1	5,30	1,20963
HEI 2	6,00	1,24262

HEI 3	5,75	0,96450
HEI 4	5,32	0,81546
HEI 5	5,62	0,73414
HEI 6	5,77	0,76621
HEI 7	5,32	1,77605
HEI 8	5,01	0,77116
HEI 9	5,23	0,97041
HEI 10	5,60	0,86818

Source: Survey data.

According to Table 4, it can be seen that Dimension 3 in IES 2 has the highest mean (6.00), however, the standard deviation is higher (1.24262), meaning a high dispersion of the data. In other words, the data are heterogeneous regarding the role of Controllership in the functions related to the Management of Organizations. On the other hand, the IES 5 presents a lower mean (5.62), but with the standard deviation also lower (0.73414), demonstrating greater homogeneity among the data, that is, the students of IES 5 show greater agreement in relation to the activities and functions are more related to the management process.

It was also verified that there was no significant difference in the level of 0.05, among the students who are attending this semester, those who have already studied, and those who studied the subject of control within another subject of the course. Likewise, there was no difference between the responses of students who worked and those who did not work in the area.

The mean and standard deviation were then calculated. Table 5 shows the result of the mean and the standard deviation of the other dimensions proposed in the article (Dimension 1, Dimension 2, and Dimension 4). Emphasizing that D1 refers to the Primordial Attribution of Controllership; D2 - Primordial assignment of the Controller of an Organization; D3 - Controlling Activities and Functions Related to the Management Process; D4 - Posture of Controllership in Organizations.

Table 5. Mean of model dimensions

HEI	Dimension 1	
	Mean	Standard deviation
HEI 1	4,53	1,08732
HEI 2	5,35	1,39301
HEI 3	4,35	1,34012
HEI 4	4,69	0,98647
HEI 5	4,85	0,99450
HEI 6	4,97	1,36100
HEI 7	4,52	1,03783
HEI 8	5,08	1,10871

HEI 9	5,17	1,17411
HEI 10	5,00	0,89904
HEI	Dimension 2	
	Mean	Standard deviation
HEI 1	4,88	1,32007
HEI 2	4,89	1,65269
HEI 3	4,80	1,22913
HEI 4	4,87	1,24800
HEI 5	5,87	0,64226
HEI 6	4,97	1,27401
HEI 7	3,96	1,37689
HEI 8	5,25	0,97073
HEI 9	5,09	1,41784
HEI 10	5,02	1,12226
HEI	Dimension 4	
	Mean	Standard deviation
HEI 1	5,38	1,12368
HEI 2	5,77	1,29835
HEI 3	5,73	1,21601
HEI 4	5,19	0,97587
HEI 5	6,00	0,79415
HEI 6	5,53	1,22087
HEI 7	5,07	1,52753
HEI 8	5,44	1,38826
HEI 9	5,54	1,02596
HEI 10	5,63	1,01993

* 95% confidence interval for mean

Source: Survey data.

By means of Table 5 it is possible to verify the result obtained by calculating the mean and standard deviation of the model dimensions. It can be noticed that in Dimension 1 - Primordial Attribution of Controllership, the average of the questions that represent it varied between 4.35 and 5.35. This data indicates that, in the perception of the students, there is agreement that the functions of the Controllership are related to operations activities, such as: keeping the accounting records of the company's transactions, performing the equity control; preparing financial statements, disclosing accounting information, ascertaining, verifying, recording and collecting taxes, carrying out financial controls; perform internal auditing, among other functions.

As Beuren (2002) asserted, the controlling body, as an administrative body, assumes this staff function, providing advisory services to managers, based on information regarding the performance of all sectors. Similarly, Lunkes et al. (2010), when comparing the functions of the controlling area, in three countries, have verified that the controllership still performs quite informative functions, but has been expanding its activities for more strategic purposes in organizations.

As for Dimension 2 - Primordial Assignment of the Controller of an Organization, Table 4 shows that the average of the variables representing this dimension presented variations between 3.96 and 5.87. This data reflects that the academics understand that the relationship with the Stakeholders of an organization is an important function of a Controller.

Martin (2002) corroborates that in addition to the internal attributions, it is the responsibility of the controlling shareholder to satisfy stakeholders, such as customers / users and investors / shareholders, gathering this information simultaneously and in a balanced way. Borinelli (2006) confirms that the controller, "as an organizational unit meets the demands of the various stakeholders, relating to shareholders, investors or owners, with government and regulatory agencies, collecting agencies and external auditors."

Also, according to Table 4, in relation to Dimension 3 - Controllership Activities and Functions Related to the Management Process, it was verified that this dimension presented the second highest average among the proposed dimensions (variations between 5.01 and 6.00).

In this regard it is possible to infer that academics recognize the Controllership is not only as a set of operational functions, although they also consider them important, as verified in the results of Dimension 1 (Table 4). For the respondents, the participation of the Comptroller should be incorporated into the most strategic decisions related to the management processes, such as the elaboration and control of the strategic planning and participation of the processes of: budget elaboration and control, internal and external environmental analysis, performance, management costs measurement, managerial transfer price, sales price definition and tax planning process.

Paiva and Facci (2014) affirm that there is an interest on the part of HEIs in providing students, in addition to the basic concepts and attributions of the area of control, and aspects of organizational management. Araújo, Callado and Cavalcanti (2014) identified with MBA's students in controllership that among the skills most worked in the courses already include the skills associated with the strategic planning of organizations. With regard to the labor market, Gomes et al. (2014) found that companies are already demanding from

the controllers that they participate in management in a systematic way.

Confirming the result of Dimension 3, in Dimension 4, which refers to "Posture of Controllership in Organizations" (Table 4), it can be observed that in the conception of graduates of Accounting Sciences, the Controllership assumes several roles, including advisory, consulting, audit and internal spokesperson of senior management. This dimension was the one with the highest mean (5.07 - 6.00) among all those surveyed. However, from the frequency counts indicated in Table 6, it is possible to identify the roles of the controllership that excelled.

Table 6. Classification of Role / Posture of Controllership in Organizations

Role / Position of Controllership in Organizations	Frequency
Advisor	32,5%
Consultant	32,1%
Parent company	70,5%
Auditor	23,5%
Internal spokesperson for top management	37,2%

Source: Survey data.

According to Table 6, the students indicated that the role / position that the controlling company assumes in the organizations is that of "Controller" (70.5%), followed by the role of internal spokesperson of the top management (37.2%). On the other hand, Borinelli (2006), when investigating the reality of Controllership practices of the 100 (100) largest private companies in Brazil, found that among the roles assumed by the controlling company, the audit position was one of the most cited. To conclude, Table 7 will present the ranking of the questions with the highest score, of each dimension.

Table 7. Ranking of the questions with the highest score, by size.

Dimensions	Questions	Likert	Frequency
D1	Q1	7	50,4%
	Q10	7	56,4%
D2	Q22	7	53,4%
D3	Q31	7	53,6%
	Q32	7	52,8%
D4	Q45	7	70,5%

Source: Survey data.

Table 7 shows that the question that obtained the highest score on the Likert scale was Q 45, of dimension 4, which refers to "Posture of

Controllership in Organizations". 70.5% of the students perceive that the controller has or should have a position aimed at advising, consulting, auditing and can act as internal spokesperson for top management. Table 8 presents the significance index (Sig.) And the variance inflation factor (VIF) that the variables have for the regression model, using as a dependent variable the Q45, the most representative variable in the students' perception.

Table 8. Linear Regression

Assumption	Tests	Hypotheses
Statistical significance (D1Q1, DIQ4, D1Q6, D1Q10, D1,Q14, D1,Q15, D1Q16, D1Q18, D1Q20, D1Q21, D2Q22, D2Q24, D2Q25, D2Q26, D2Q29, D3Q31, D3Q32, D3Q37, D3Q39, D3Q40, D3Q41, D3Q43, D4Q44, D4Q47, D4Q48)	Sig. = 0,000	There is significance in the model
Randomness	Durbin-Watson = 1,745	There is no first-order autocorrelation among the residues.
Explanation	R square = 0,530	Correlation between independent and dependent variables and R2.
Multicollinearity	VIF = values between 1,351 e 3,420.	Values smaller than 10 indicate that there is no problem of multicollinearity in the model.

Source: Survey data.

According to Table 8, the regression showed significance in the variables presented in the table, after the debugging of the model, in which the questions D1Q2, D1Q3, D1Q5, D1Q7, D1Q7, D1Q9, D1Q9, D1Q11, D1Q12, D1Q13, D1Q17, D1Q19, D2Q23, D2Q28, D3Q33, D3Q34, D3Q35, D3Q36, D3Q42, D4Q46, with indices of 0.000.

Another analysis observed was the variance inflation factor (VIF) that measures the effect of the independent variables on the regression coefficient. When the FV values are above 10, it indicates a high degree of collinearity or multicollinearity

between the independent variables, assuming a problem in the model. Thus, in agreement with Table 8, the collinearity test was performed using FIV, and it was verified that all variables had a low correlation between the independent variables.

Finally, we verified the correlation between the dependent variable D4Q45 "Posture of Controllership in Organizations", with the other independent variables already mentioned, and its degree of explanation (R²), in which it was possible to verify that the correlation was 53%, which is an adequate level, since it is above 0.5 (KOUFTEROS, 1999).

5 Conclusions

The main objective of this study was to verify the students' perception in Accounting Sciences of the responsibilities of Controllership and the role of Controller in organizations. For this, a quantitative approach was adopted based on the theoretical perspectives of Borinelli (2006), descriptive analysis and the statistical techniques of analysis of means, Kruskal-Wallis test of independent samples and nonparametric test of independent sample.

The main results indicated that the 233 students of the Accounting Sciences course of the 10 HEIs investigated did not present significant difference of opinion regarding the dimensions addressed (Primordial Attribution of Controllership, Primordial Attribution of the Controller of an Organization, Controlling Activities and Functions of the Process Management Posture of Controllership in Organizations).

Likewise, the fact that the students have already studied or are undergoing the discipline of controllership and the fact of working or not in the area, did not cause significant divergence in opinions.

It was observed that in the students' perception, there is agreement that the functions of the controller are related to operational activities. However, higher averages were found in the issues that related control to more strategic management activities. This result indicates that there is already a perception on the part of the graduates in accounting sciences that the controller is assuming an increasingly strategic position in the organizations, as affirmed by Calijuri et al. (2005); Lunkes et al., (2011); Lourensi and Beuren, (2011).

Regarding students' perceptions of the "Primordial Attribution of the Controller of an Organization", the results indicated that the relationship with the Stakeholders of an organization is an important function of the Controller.

Finally, with regard to the "Position of Controllership in Organizations", the students suggested that it assumes a variety of roles, including those of controller, adviser, consultant, auditor and internal spokesperson for top management. However, among the various positions, the controller and spokesperson of the top management were the controlling roles that stood out.

6 Limitations and Future Research

The research limitations are: the use of a non-probabilistic sample, the possibility of bias in the respondents' perception, and the fact that the conclusions are restricted to the sample.

In this study, the conceptual, procedural and organizational aspects proposed by Borinelli (2006) were used to verify the accounting students' perception of the responsibilities of the area of control. It is suggested that in future studies the perspectives of Borinelli be used for the analysis of the adequacy of curricula of the higher courses of accounting sciences, as well as for the verification of the teacher perception about the attributions of the controller.

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