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Measuring the Perception of the Students of Undergraduate Degree in Business Administration in Relation to Disciplines in the Area of Accounting

Percepção dos Discentes do Curso de Graduação em Administração em Relação às Disciplinas da Área de Contabilidade

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Abstract

This research has as main objective to measure the perceptions of students of undergraduate degree in business administration in relation to disciplines in the area of Accounts in three higher education institutions. The study involved quantitative evaluation structured questionnaires were applied to a sample of 111students in business administration to measure the perception in relation to accounting education. We used the following data analysis techniques: factor analysis and descriptive statistics. The main results showed how suitable the model with 36 variables to measure them after the KMO, Sphericity of Barllet that indicated a satisfactory degree of adjustment and data reliability, and therefore was subject to factor analysis, with approximately 67% total variance considered accepted and explained in 10 dimensions, building a correlation between variables and internal reliability for final analysis.

Keywords: Teaching; Accounting; Administration.

Resumo

Esta pesquisa como tem objetivo principal mensurar a percepção dos discentes do curso de graduação em Administração em relação às disciplinas da área de Contabilidade em três instituições de ensino superior. O estudo envolveu uma avaliação quantitativa em que foram aplicados questionários estruturados a uma amostra de 111 graduandos para mensurar a percepção em relação ao ensino de Contabilidade. Foram utilizadas as seguintes técnicas de análise dos dados: análise fatorial e estatística descritiva. Os principais resultados evidenciaram como adequado o modelo com 36 variáveis para mensura-las após os testes de KMO, Esfericidade de Barllet que indicaram grau satisfatório de ajuste e confiabilidade dos dados, e, portanto, foi submetida a análise fatorial, com aproximadamente 67% de variância total considerada aceita e explicada em 10 dimensões, construindo uma correlação entre as variáveis e uma confiabilidade interna para se chegar a análise final.

Palavras-chave: *Ensino; Contabilidade; Administração.*

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Introduction

Generally, in Accounting superior courses, subjects like administration, economy, mathematics and alike frequently are offered because they provide necessary knowledge for the accountant, in order to perform his/her profession. However, it is important to have a kind of interdisciplinary attitude, that is, apart from the offer of the referred subjects, the student must be conscious of their role in his/her background and not regard those merely as "mandatory" curricula (PADOVAN; CLEMENTE, 2006).

Something special occurs with the courses of accounting and administration, since both benefit from each other, once Accounting gets necessary information for planning and decision making, what is useful in decision process, providing concepts and basic tools to the manager, in order to analyze reports based on operational results from the company. Besides all this, accounting and administration interact with other subjects, such as: Corporate Social Responsibility, Tributary Law, Budget, Planning, Control, General Administration, Projects and others.

It is known that every applied contextualization gets reinforced through the interaction of the involved agents in the process of teaching and learning in the course of Business Administration, englobing professors, heads of the departments and students, who consciously of the needs of managerial professionals and the organizations know that the background of the undergraduate student gets more efficient and suitable to the reality. As interdisciplinary approach gets more present in courses, it is possible to debate Accounting as one of the key-pieces in the background of students from Administration courses, along with other subjects, so the future professional in Administration becomes more qualified to take decisions and deal with the complex nature of organizations themselves, as to perform and contribute to development of the society.

According to the 3rd Article of Resolution number 4, from July 13th, 2005, of National Education Council (Conselho Nacional de Educação), in charge for the National Curricular Guidelines for the Administration superior courses, the superior institutions must provide for the undergraduate students, capacity and ability to understand scientific, technical, social and economic matters regarding production and management, as well as ability to observe each step in decision making process, and

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develop a proper qualitative management, revealing the incorporation of new pieces of information and showing intellectual flexibility to contextualized adaptability in the approach of diverse situations (actual or emergency ones) in different segments of the professional performance of the administrator or manager.

Considering the importance of both knowledge and information in accounting for the background of Business Administration undergraduate studens, we present the following research question: what is the perception of students from a bachelor degree in Administration towards subjects related to Accounting?

The present research work aims at measuring and analyzing the perception of undergraduate students from an Administration superior course towards the Accounting subjects offered in the referred course. Such research is justified due to some economic and social changes that require from the Administration student the use of information provided by Accounting in order to improve the performance of his/her activities, as well as proposing new evidences that the teaching of Accounting be also improved, aiming a better comprehension and alignment with market demands.

This article is structured as follows: there is an introduction, than a theoretical review, approaching the administrator background and accounting teaching, followed by specific studies from accounting courses. Then, the following sections are methodology and result analysis. Finally, discussion shows the conclusions about the present study.

Theoretical Review

Administration background and Accounting teaching

Oliveira and Sauerbronn (2007) state that the trajectory of development of superior administration courses reveals a kind of ambiguity, because, from one side the origin of Administration courses in Brazil are linked to the need of providing modern configuration to the nation and the economic development of the country. In another side, this trajectory reflects the structural obstacles related to the starting process of superior courses in the country, since at first superior courses were created to assist a small economic and cultural elite, and as a consequence, kept apart from the social transformations occurred in Brazil. Specifically in this matter, it is seen a complex

parallel, due to the difficulty to balance and stablish the origin of this kind of study to assist social demands.

The administration undergraduate student background in Brazil is quite recent, and was based in a generalist model of business schools in USA (Motta, 1983; Bertero, 1994; Fischer, 2001). The inspiration from American business schools, which prioritize the focus on organization performance, the knowledge acquired by the undergraduate student was grounded in a sort of a classic mechanical and instrumental view of *homo economicus*, as described by Aktouf (2004). Aktouf (2004) calls the attention of the logic presented in business economics, which exerts influence in managers, by offering structured contents, which deals almost exclusively with mathematics abilities and diminishes the emphasis in cultural and humanistic topics.

As time went by, the technicalities teaching, strictly elaborated for professional purposes, with deep technical knowledge, what prevailed in most pedagogical curriculum from superior institutions, aiming to guarantee the professional performance of the Administration graduate to perform in different organizations.

The manager, when he creates an economic organization and becomes a businessman, must be able to measure and diminish possible risks from factors that might threat the development of a certain activity, and accounting should be considered as a source of valuable information to the company, since it deals with data generated by all profit centers.

Laffin (2004, p. 148) comments the process involving teaching and learning in Accounting: "It is fundamental that subjects integration be accomplished in each semester or yearly, according to the institutional organization, in order to guarantee imbrication as a general overview of the knowledge is provided, and emphasizing its importance.". Teaching accounting subjects is extremely important in the life of every professional, no matter his performing area, because knowledge from several areas must enables every professional to work in a plural way, in a procedure of dealing with knowledges from different areas obtained in the process of teaching and learning.

Accounting transforms the company facts into accounting records, which when generated can be transformed into managerial information supporting diverse decision making by the administrators or managers, independently whether the firm is from

industrial sector, commercial or services like. Information from accounting enable the user with a better understanding of the facts occurred in the company in a certain period of time.

However, mostly reports generated by accounting are intended only to assist the legal aspects of the activity performed by the company. Sometimes, the managers cannot visualize the result of their actions expressed in those reports, once the classification adopted is not easily understood by the businessman. Then, it is expected from the accounting professional to find ways to emphasize certain pieces of information in the accounting reports, in order to provide support for decision making.

Accounting professionals in 21st century must possess a vast and qualified knowledge. Regarding the new necessities of the market, in which all kind of information is available in a short period of time, and also because of technological innovations, it is required from the accounting professional not only ethics but also agility towards finding solution to the problems, in providing support to decision making and update and recycle his knowledge continuously. That is why Regional Councils and the Federal Accounting Council have provided courses, seminars and discussion forums, in order to update the teaching and learning process of accountants.

Accounting teaching is very important for the background of all kinds of professionals, no matter the area they work, and must provide a plural approach, in which the knowledge gathered from several areas must coexist in the process of teaching and learning.

Precedent Studies on Accounting Teaching

Borges (2012) mapped the research works focused on the topic "Accounting teaching"; the results show a reduced number of publications in the area.

Borges & Naves (2014), by their turn, state that Brazilian academic studies present diverse objectives in approaching teaching accounting in Administration courses. Some of the research works investigated the characteristics of accounting subjects in undergraduate Business Administration courses. Besides, those authors mention research works related to the motivation and interest of both students and professors perceptions regarding teaching Accounting.

Naves *et al.* (2012) state that such interest by Accounting might be explained by the necessity of meet the needs of companies and some kinds of profesisonals.

Alvarães & Leite (2009) include some factors as recent requirements by market and consumers, who expect from the professional the social responsibility, environmental consciousness and ethic performance in business.

Teaching accounting for non-accounters is a topic that has been discussed in 21st century, since it is helping tool in decision process. There are cases in which administrators simply put the accounting reports in the archives, simply because they do not know what to do with them, ignoring its utility and not making the right decision. Concerning the relevance of accounting knowledge in business management, Raupp (2009, p. 73) considers that superior courses in Business Administration must structure subjects related to Accounting in a way they may "insert in the process of teaching and learning knowledge and accounting discussions necessary for the performance of the professional in the area of Administration."

Labor market requires top level professionals, possessing diverse and updated knowledge regarding environmental changes. Academic studies indicate accounting knowledge prepares the Administration undergraduate student to the market and, consequently, to certain functions in organizations, especially the ones related to Finances.

Unfortunately, studies conducted on the topic "Accounting Teaching" showed minor results in terms of publications in the area. A bibliometric and sociometric study carried on by Borges and Naves (2014) show that Accounting area needs more studies, but there is a starting collaborative network of researchers, what helps the intensification of this research topic. Therefore, it is considered relevant to present here, in this article, what has been produced by the academics in terms of teaching Accounting for non-accountants professionals, specifically undergraduate students in Business Administration.

In Brazil, in general, research about Accounting regarding the background of Business Administration undergraduate students, has been focus in Master's thesis, academic publications and events. Table 1 displays the results of each kind of research.

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Table 1 – National Studies

Author	Source Type	Objectives	Main Results
Cecconello (2002)	Master's Thesis	Analyzing the successful factors in teaching Accounting subject for non-accountants in graduation courses in the area of Administration.	Accounting subject aims to meet the needs of superior courses expectations towards the competitive behavior of undergraduate students.
Tcheou (2002)	Master's Thesis	Evaluating the teaching process of Accounting in Administration superior courses in the city of Sao Paulo.	There is no difference in terms of contents. The methodology used is not adequate for Administration superior courses.
Harada (2005)	Master's Thesis	Identifying the perception of professors of Accouting about teaching subjects related to Accounting in Administration superior courses.	There is a predominance of traditional teaching methods focusing technical abilities. Difficulties in learning causes lack of motivation and preventing attitudes from the students in understanding the importance of Accounting.
Raupp *et al*. (2009)	Business publication	Describing the profile of General Accounting and Costs in Administration superior courses presented in the syllabus of such courses.	Predominance of lecture classes. Frequent evaluation based in tests.
Bianchi *et al*. (2010)	Journal (Enfoque)	Analyzing the subject Introduction to Accounting relating to the following categories: institutions, courses, professors, and profile of the non-accounting undergraduate students.	Results indicate a correlation between the proposed categories and some of variables of the study. There is both homogeneity and heterogeneity between the studied groups.
Costa *et al*. (2011)	Journal (REPEC)	Analizing the interest of Administration undergraduate students regarding Accounting subjects.l	Students reveal a moderate interest but consider Accounting important for Administration purposes.
Azevedo *et al*. (2011)	Event(EnEPQ)	Analyzing the interest of undergraduate Administration students for the Finances area.	Previous experience of Administration undergraduate students does not have meaningful impact in his/her level of interest.
Naves *et al* (2012)	Revista de Administração da Mackenzie (Journal)	Reflecting about the experience of teaching and learning having as reference the critical perspective for Master's and Doctorate Degree in Administration.	The study shows the development of social relationships – inclusive in teaching and learning processes involving both docents and undergraduate students.
Borges *et al* (2012)	Annals of the 12th Accounting Congress held at University of São Paulo (USP)	The state of art of teaching Accounting.	The study reveals a strong relationship between scientific production only in some authors in the concentration area.
Borges & Naves (2014)	Revista de Contabilidade e Organizações (Journal)	Analyzing the behavior of undergraduate Administration students regarding Accounting subjects.	The study show s the procedures of measuring the behavioral attitudes of undergraduate students of Administration superior courses regarding Accounting subjects.

Source: Adapted from Borges and Naves (2014).

As it is shown in Table 1 (Cecconello, 2002; Tcheou,2002;), in the first research works, it is possible to observe from information obtained in Master's thesis that neither of the authors continued the proposed research, or at least, accomplished to publish the results in events or academic journals on the related topic, what infers a lower interest by those researchers in Accounting research area.

Harada (2005) mentions that the results from traditional teaching methods (technicists) turns difficult for the student the understanding on the subject, what explains the lack of motivation, resistance and misperception of the importance of Accounting. The author also presents an overview of research works investigating the characteristics of Accounting subjects in Administration superior courses. Besides, it is also mentioned a number of academic works focusing the interest of undergraduate students towards Accounting and (Costa *et al.*, 2011) Finances area (Azevedo *et al.*, 2011).

Raupp *et al.* (2009), Bianchi *et al.* (2010), Costa *et al.* (2011) and Azevedo *et al* (2011) emphasized the importance of Accounting knowledge for Administration purposes, however, the publishings related to Accounting are still low in terms of needs of the demand of non-accountants, concerning the interpretation of accounting reports.

Naves *et al.* (2012) reflect on the possibilities and limitations of the teaching and learning experience from the offer of a subject in Doctorate program, named "Critical Reflections in Administration area", resulting in the elaboration of social relations, including students and professors in teaching and learning process, reveling a special kind of experience.

Borges *et al.* (2012) reported a slight improvement in scientific quality of research works in Accounting area, identifying possible correlations between the indicators and productiveness of researchers, where it was observed a strong concentration of scientific production led by only a few authors in the studied period, whose results were compared and predicted by Lotka law.

It is also noticed that most authors published only one or two articles in the selected period, and those were not directly related to research lines on the topic, what would be very important for the development of research in the area. Concerning institutions, the ones who were more prolific in that matter, were public institutions, in

which, University of Sao Paulo (USP) was the one that was remarkable in the level of its publications.

According to Borges & Naves (2014) the attitudes of undergraduate students in Administration were measured regarding Accounting subjects considered very relevant for background of managerial and administrative competences. The process of teaching must prioritize the analysis and decision making by managers, what reveals in the perception of students, according to some professors, students demonstrate interest for areas like Marketing, Human Resources and alike and show resistance by Accounting subjects.

The present study is relevant because it investigates the research trends in Accounting teaching area as it verifies the tendencies of publications, researchers, topics as well as the identification of avenues of new researches. Therefore, this research work intents to contribute for the study based on teaching Accounting in superior courses in Brazil.

Methodology

Research Typology

This is a descriptive research work in its purpose, means and scope (Vergara, 2009). According to Hair Jr. *et al.* (2009), descriptive research describes a situation by measuring the event or activity. These authors claim it is possible to accomplish all this by using descriptive statistics from obtained data in a specifically created structured for measuring the descriptive characteristics described in the research question. This research also presents quantitative data in a way that investigations have empiric nature with the objective of analyzing the characteristics of groups of individuals, by the use of quantifying variables in the collected data (Marconi; Lakatos, 2006).

The study has limits in transversal cut, once the data were collected in a single time, what reveals the instant moment of data collection (Cooper; Schindler, 2003). Vergara (2009, p.43) defines survey as "a kind of empirical investigation occurred in a given place, or in which occurred a phenomenon or a context with available elements to be explained."

Thus, this research is descriptive, quantitative, field research and transversal. It aims to describes the perceived characteristics of undergraduate students, who were analyzed via scientific data, collected instantaneously by specific variables presented in a structured questionnaire and used in order to measure the proposed aspects in the objectives of this investigation.

Universe and Research Sample

The universe of this study consists of undergraduate students from three Superior Institutions, two public and one private, in which it was observed the following subjects: Basic Accounting I and II and Accounting and Costs. The institutions were located in the city of Campina Grande, state of Paraiba, Brazil. The obtained sample was gotten by convenience. According to Gil (1999), a convenient sample is the one in which the researcher selects the elements to which he/her has access, enabling such elements to represent the research universe.

Data Collection Tools

Data were collected by survey method and five-point Likert scale to measure the perception of undergraduate students of Administration superior courses regarding Accounting subjects. The aim of data collection was to get information to a more consistent analysis. The intensity of concordance level is determined by the variation of 1, related to "I totally disagree" to 5, referring to "I totally agree" (Cooper; Schindler, 2003).

Regarding data collection tool, this consisted of structured questionnaire, comprehending 36 items referring to measuring patterns of Attitude of the undergraduate students regarding teaching methods of Accounting (Borges & Naves, 2014).

The questionnaire was responded by 111 undergraduate students of Administration courses who, in 2016, were enrolled between the third and fourth year, in the three selected institutions. Those questionnaires were responded in classrooms, with the permission of the professor and after obtaining a previous authorization from the head of the department of each institution.

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According to Vergara (2009), data treatment provides a correlation between the objectives of the research and the means to accomplish them. Thus, the collected data was treated, at first, by a statistic descriptive analysis of multivariate analysis of variance (MANOVA). The software SPSS 22 was used for the treatment and data analysis.

The questionnaire was sectioned into 36 items and aimed to evaluate the 10 dimensions: (1) implications of Accounting teaching in practice, (2) self-confidence, (3) personal interest, (4) perceived difficulty, (5) monitoring usefulness, (6) domain in the level of practical activities, (7) perceived importance, (8) interdisciplinary approach, (9) domain of abilities in theoretical level, (7) perceived importance, (8) interdisciplinary approach, (9) domain of theoretical abilities and (10) learning forms.

Analysis and Results

According to Table 2, from the 111 respondents in the final sample, it is observed a balance between the two genders, with a slight inclination to male sex, 62 respondents (55.86%). From the total of respondents,67 (60.36%) were 20 to 25 years old; 88 (79.28%) were single; 64 (57.66%) studied at private Superior Institutions and 36 (32.43%) exerted as a secondary occupation functions in private companies.

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Table 2- Socioeconomic information

Gender	**N**	**(%)**	**Institution**	**N**	**(%)**
Female	49	44.14	Public	47	42.34
Male	62	55.86	Private	64	57.66
Total	111	100.00	Total	111	100.00

Age	N	(%)	Civil Status	N	(%)
Less than19 years old	10	9,01	Single	88	79.28
From 20 to 25	67	60,36	Married	21	18.92
From 26 to 30	21	18,92	Widow(er) Divorced	2	1.80
Above 31 years old	13	11,71			
Total	111	100,00	Total	111	100,00

Secondary Activities performed by the Undergraduate Students	**N**	**(%)**
Student only	28	25.23
Employee regularly at a private company	36	32.43
Trainee	18	16.22
Has a kind of scholarship	02	1.80
Public Employee	16	14.42
Entrepreneur	10	9.01
Part-time Scholarship	01	0.90
Total	111	100.00

Source: Elaborated by the authors.

After using the technique of factor analysis, it was verified the possibility of condensing information obtained from the original variables in the measuring attitude from the student regarding Accounting teaching, based in the work of Borges & Naves (2014) and a minor set of factors (Hair Jr. *et al.*, 2009)

Exploratory factor analysis was performed using the method of extraction of main components and orthogonal Varimax method in factor's rotation. Correlation matrix between variables was observed and it shows both moderate and high correlations between the variables, indicating no situation of no-correlation or high standard correlations, what would lead the exclusion of one or some variables (Field, 2009).

The determinant of correlation matrix was calculated and resulted in 0.00000000357 which is lower than 0.00001 and this leads to the belief some of the variables might be excluded from analysis (determinant must be used only for factor analysis and not from the main components) (Field, 2009).

Sample adequation was measured by Kaiser-Meyer-Olkin (KMO) test, being indicated values over 0.50 as the minimal acceptable in this kind of test. Associated to this, Barlett sphericity test indicates the presence of meaningful correlations between the scale itens, and the meaningful test must not be over 0.05 (Corrar *et al.*, 2011).

KMO measure might be interpreted as a correlation and therefore might presente the following classification criteria.

Table 2 – Sample Adequation

KMO	Factor Analysis Use
0.90 – 1.00	Very Good
0.80 – 0.90	Good
0.70 – 0.80	Regular
0.60 – 0.70	Mediocre
0.50 – 0.60	Very Bad
< 0.50	Unacceptable

Source: Maroco (2003, p. 268).

In the present study it was observed a KMO equal to 0.741, being classified as a medium index, acceptable to proceed to factor analysis (see table 2) indicating the possibility to proceed to factor analysis.

However, Barlett sphericity test, as we see in Table 3, was very meaningful (Mean = 0.000) what confirms once again the existence of correlation between the variables. The statistic text of correlation matrix counter-image evaluates the adequacy of each variable to factor analysis model.

Table 3 – KMO and Bartlett's Test.

Tests		Factor
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.741
Bartlett's Test of Sphericity	Approx. Chi-Square	1783.307
DF		630
Sig.		0.000

Source: Elaborated by the authors.

According to table 4, the total variance of the factors reached 67.21%. Malhotra (2012) recommends that such figure be over 60%. Thus, considering total variance explained to the performed factor analysis, this figure was accepted.

As for dimensions, it was adopted the cut-point to analyze the contribution of each variable to explain each factor to be obtained by the analysis. The factor charges were over 0.364, which raised to the square corresponds to the approximately explanation of 13.25% of the variance of the variable. For a sample of 100, an upper charge of 0.45 must be considered as significant (Field, 2009, p. 569).

Table 4 – Total Variance Explained

Itens	Initial own values			Addings from extrations elevated to the square[1]			Rottative Addings from elevations to the square[2]
	Total	% of Variance	% Cumulative	Total	% of Variance	% Cumulative	Total
1	8.166	22.684	22.684	8.166	22.684	22.684	5.583
2	3.289	9.136	31.821	3.289	9.136	31.821	6.178
3	2.659	7.387	39.208	2.659	7.387	39.208	2.733
4	1.819	5.054	44.261	1.819	5.054	44.261	4.049
5	1.753	4.869	49.131	1.753	4.869	49.131	2.492
6	1.577	4.380	53.510	1.577	4.380	53.510	2.785
7	1.391	3.864	57.374	1.391	3.864	57.374	3.248
8	1.312	3.646	61.019	1.312	3.646	61.019	3.345
9	1.213	3.369	64.389	1.213	3.369	64.389	1.652
10	1.016	2.823	67.212	1.016	2.823	67.212	1.863
...	...	...	...				
36	.107	.296	100.000				

Obs. 1: Extraction Method: Main Component Analyisis.
Obs. 2: when the components are correlated, the addings of elevations to square cannot be added to obtain a total variance.
Fonte: Elaborated by the authors.

The first factor explains 22.684% of variance of data and therefore is the most significant factor in explanation of original data from this research. The other factors have relatively less importance in summarizing the original variables. For example, the last dimension factor explains 2.823% of data variability. Together these factors explain 67.212% of original variation of the measures.

Dimension 1: Implications for Teaching Accountancy in Practice

For the initial analysis, the referred dimension will be named "Implications for Teaching Accounting in Practice", since, the composed variables are all related to the way acquired knowledge by studying Accountancy may be useful for the future professional of administration.

Results indicate a high level of correspondence, with the highest average (4.378), showing that an administrator who has skillfulness in accounting area will identify more easily the manipulation of information and frauds.

Table 5 – Implications for teaching Accounting in practice

Itens	CF	M	DP
The businessman or manager who has skillfulness in Accounting area will identify more easily the manipulation of information and frauds.	.692	4.378	.821
Accounting information help in decision making.	*	4.198	.772
The businessman or manager uses concepts and Accounting techniques in practice.	.608	3.802	.851
Accounting subjects will be useful in the routine of a businessman.	.521	4.306	.698
As empresas necessitam de administradores com conhecimento contábil.	.514	4.261	.828
É necessário que os alunos do curso façam disciplinas de contabilidade.	.900	4.279	.765
Cronbach's Alpha		**.688**	

Source: Elaborated by the authors.

Such fact might be in discussion due to the fact several frauds have been occurring in the last decades, of different kinds, i. e., alteration of original documents, fake means to records, fake invoices, alteration in inventory, documents destruction, fake means to records etc. It is also confirmed in the variable with the lowest average (3.802), corresponding to "The businessman or manager uses concepts and Accounting techniques in practice", revealing the importance of teaching and learning to the future professional of Administration and the applicability of Accounting in practice.

Dimension 2: Self-Confidence

This variable was displayed as Self-confidence, since variables related to self-confidence of the undergraduate students before their knowledge regarding Accounting in our outer classroom.

Table 6 – Self-Confidence

Itens	CF	*M*	DP
I feel myself confident when I respond evaluation tests in classroom.	.754	3.315	.981
I understand the results from Accounting Demonstration Analysis.	.834	3,505	1.017
I feel myself confident in using Accounting knowledge in practice.	.835	3.117	.988
I am not afraid of Accounting subjects.	.650	3.324	1.055
I understand well the basic concpts of Accounting (Active, Passive, Net assets)	*	3.910	1.032
Cronbach's Alpha		**.810**	

Fonte: Elaborated by the authors.

Dimension 2 englobed five variables presenting a good inner consistence, revealing that undergraduate students were coherent in responding the questionnaires.

The variable "I understand well the basic concepts of Accounting (Active, Passive, Net assets) obtained the highest average (3.910) in Confidence factor, revealing students have basic knowledge of Accounting. In a similar way the variable "I understand the results from Accounting Demonstration Analysis", what can possibly inferred that undergraduate students are more interested in Accounting subjects due to evident frauds as described in the dimension, as well as its importance in professional life.

Dimension 3: – Personal Interest

Dimension 3 was labeled "Personal Interest", since variables indicate interest by the college students regarding Accounting subjects. The variable that showed the highest average (3.730) was "The Accounting subjects are, in my opinion, very interesting".

Table 7 – Personal Interest

Itens	CF	M	DP
Accounting subjects are, in my opinion, very interesting	.575	3.730	.943
I really enjoy having Accounting subjects in my course.	.846	3.405	.976
Accounting interest emerged from the process of studying related subjects.	,842	3.261	1.142
I would not choose Accounting subjects as elective ones.	*	2.387	1.266
I realize the relationship between Acccounting subjects and the others.	.554	3.604	.984
Cronbach's Alpha		.255	

Source: Elaborated by the authors.

As it is seen, there is a high significance of the variable "I really enjoy having Accounting subjects in my course", revealing the opinion of Accounting seen as interesting and the pleasure of having it as subject. Regarding the lowest average (2.387) reveals that even if Accounting subjects were elective, students would choose them. Such result might be understood as recognition by the students of the importance of Accounting in the academic life of the undergraduate student of Administration.

Dimension 4: Perceived Difficulty

Dimension 4 was labeled "Perceived Difficulty", since it was shown common atitudes related to complexity and difficulty towards Accounting subjects.

The highest average was 3.523 was obtained in the variable "The content of subjects in that area is very complex, despite being useful", showing the partial

agreement among the students, that is, resulting that students consider those subjects complex, but they recognize the importance of them for the practice of the intended profession. Raupp *et al.* (2009) claim that Accounting subjects are essential to the professional life of an administrator, since by the use of Accounting science it will be revealed the history of a given company, by the records of Accounting actions and facts

Table 8 – Perceived Difficulty

Itens	CF	M	DP
The content of the subjects in this area is very complex, despite useful.	.552	3.523	1.111
Subjects in this area are more difficult than the other subjects.	.891	2.883	1.085
Accounting subjects are very complicated.	.824	2.928	1.181
Accounting subjects can be easily understood.	*	2.919	1.113
Cronbach's Alpha		.421	

Source: Elaborated by the authors.

The variable that got the highest average (2.883) was "Subjects in this area are more difficult than the other subjects". The students reveal discordance when stated that they did not consider Accounting more difficult than other subjects in their course. Mahorta (2006) states that when methodology is taught in a proper way, everything is understood more easily, from basic level to the most complex content, since everything depends on the adopted method.

Dimension 5: Monitoring usefulness

Dimension 5 was called "Monitoring usefulness", because the statements measure the perception of students about the usefulness of complementary teaching. In this dimension, it was perceived that in the variable "language style" between the monitor and the student facilitates the content understanding and obtained the highest average (2.775). However there was a discordance between the assertion, resulting that the style of language between the monitor and student does not facilitate the contents, explaining that monitor himself/herself was not considered fundamental in the process of learning, as the students declared not looking for the monitors in order to have complementing classes on Accounting subjects, despite Santos (1998) reinforced the important role performed by monitors in order to get further knowledge on the topic, as in the process of teaching and learning.

Table 9 – Monitoring usefulness

Itens	CF	M	DP
Monitoring was fundamental in my learing process.	.809	2.477	1.220
I frequently looked for the monitors to assist me in subjects in that area.	.758	2.432	1.255
The "language style" between the monitor and the student facilitates the mutual understanding.	.755	2.775	1.326
Alfa de Cronbach		.770	

Fonte: Elaborated by the authors.

Dimension 6: Domain of skillfulness in practical level

Dimension 6 was named "Domain of skillfulness in practical level" presented by two variables, emphasizing the ability of students in using Accounting knowledge in practice, according to teaching and learning from classes.

The average of the two questions show agreement, expressing that most students can use Accounting knowledge and apply suck knowledge in decisions related to business management in practice. Such representativeness may fit the other dimensions previously described, indicating both interest for the subjects and recognition towards its usefulness.

Table 10 – Domain of skillfulness of a practical level

Itens	CF	M	DP
I can use Accounting information in the process of business management.	.571	3.550	.871
I am able to apply accounting principles in strategic decisions.	.514	3.387	.955
Alfa de Cronbach		.769	

Source: Elaborated by the authors.

According to (2010), the administrator who is able to analyze and interpret accounting information will be more apt to perform a better job, as well as to know and apply economical knowledge.

Dimension 7: Perceived Importance

Dimension 7 showed two variables and was named "Perceive importance" due to the important role the subjects performed in the perception of undergraduate Administration students, as well as the analysis comparing with other subjects from the course.

Concerning the averages, it prevailed a disagreement total and partial between those variables: "Accounting subjects do not make any difference for a good background" and "Accounting subjects does not have any relation with other subjects from the Business Admnistration courses", those were denying variables.

Table 11 – Perceived importance

Itens	CF	M	DP
Accounting subjects do not make any difference for a good background.	.901	1.847	1.029
Accounting subjects do not have any relation with other subjects from the Business Administration courses.	.989	1.793	1.028
Cronbach's Alpha		.727	

Source: Elaborated by the authors.

However, the results reveal that Accounting subjects do make difference for a good background, as well as they are related to the other subjects from the Business Administration courses, that is, the students realized the interdisciplinary approach in the process of teaching and learning.

Dimension 8: Interdisciplinary Practice

Dimension 8 was labeled Interdisciplinary Practice by three of the variables converging to the meaning of interdisciplinary. The variable with highest score, which got closer to "partial agreement" (3.736) was "The Accounting knowledge enables the administrator to handle better with the company's data, outlining only what he wants", a fact that can be explained by several factors.

Table 12 – Interdisciplinary practice

Itens	CF	M	DP
Accounting knowledge enables the administrator to handle better with the company's data, outlining only what he wants.	.484	3.736	1.123
Professors of other subjects make connections with Accounting area.	.760	3.173	1.156
Accounting professor establish a dialogue between other subjects.	.864	3.182	1.143
Accounting knowledge is necessary for the other subjects of the course.	.608	3.527	1.073
Cronbach's Alpha		.616	

Source: Elaborated by the authors.

According to Anthony (1974), Accounting must concern about generating useful information to administration, in order to meet the needs of managers. Frequently the businessman sees the accountant merely as a person who accomplishes all the necessary

requirements by the Law, and the administrator does whatever he feels like with the reports, handling them according to his preference.

The other variables indicate a strong correlation, evidenciating the interdisciplinar practice among the subjects offered by the course. Interdisciplinarity is the ground to a global knowledge, enabling students to improve and continuously renew his own knowledge, that is why it is important to look over the subjects borderline.

Dimension 9: Domain of skillfulness in theoretical level

The dimension 9 was labeled "domain of skillfulness in theoretical level" since variables pointed both theoretical domain by the students towards Accounting area, such as tax regime and accounting demonstration structures.

The scores in those two questions indicate partial agreement, that is, most students understand the characteristics and the accounting demonstration structures, as well as they understand the application of tax regime in organization activities.

Table 13 – Domain of skilfulness in theoretical level

	CF	M	DP
I understand the application of tax regime in organization activities..	.737	3.288	1.099
I understand the characteristics and structure of accounting demonstration structures.	.608	3.459	1.034
Cronbach's Alpha		.665	

Source: Elaborated by the authors.

Marion (1997) considers the Accounting Theory in undergraduation courses as having its role in the development of a accounting reasoning skill and not only a kind of practical or machanical approach. The author also reinforces the importance of keeping the student's interest by the subject and one of the alternatives to do that is to show how Accountant became a tool in decision making, no matter who is the user of the information.

Dimension 10: Ways of learning

Dimension 10 was named ways of learning once it involves the alternatives to learn Accounting subjects. The variable that indicated more agreement by the students was "I learn Accounting subjects studying not only in the classes" with the score 3.327.

That means that most students reveal learning more about Accounting outer classroom, consulting books, watching video-classes at home or even having some monitoring, as an extra learning. This might occur due to teaching methodology in classrooms that are not showing good results in learning way, as it shows the high level of agreement.

Table 14 – Ways of learning

	CF	M	DP
I learn the Accounting subjcts studying not only in classroom.	.521	3.327	1.110
Accounting subjects are not difficult, but the methodology used in classroom does not facilitate the process.	.838	3.036	1.226
Monitors are not well prepared to assist the Accounting classes.	.595	2.900	1.165
Cronbach's Alpha		.333	

Source: Elaborated by the authors.

Conclusions

This article aimed at measuring the perception and attitudes of undergraduate students of Business Administration superior courses towards subjects in the area of Accounting. This study consisted of a quantitative research by the use of multivariate and descriptive statistics, with 36 variables applying both KMO and Barlett' Sphericity test. The results indicate a satisfactory adjust and reliability of data, which was submitted to a factor analysis. Total variance was explained in approximately 67% and considered accepted. This study also designed ten dimensions: (1) implications of teaching Accounting in practice; (2) self-confidence; (3) personal interest in practice; (4) perceived difficulty; (5) Monitoring usefulness; (6) domain of abilities in practical level; (7) perceived importance; (8) interdisciplinary practice; (9) domain of abilities in theoretical level; (10) ways of learning.

The second dimension retained in factor analysis is the one that explains better the research model, by having high factor charges and data internal consistence (Cronbach's Alpha = 0.785), englobing variables indicating "self-confidence", that demonstrated that students feel themselves moderately self-confident towards the basic concepts of Accounting, as in analyzing and understanding the Accounting demonstrations. The dimension, implications of teaching Accounting obtained the highest score (4.378), in a variable in which students agreed that administrators who

possess abilities in accounting area will be able to identify more easily manipulation of data and frauds.

The results of the study reveal that undergraduate students demonstrate strong interest in studying Accounting subjects and would apply to study them even if they were not obligatory and offered as elective ones. They also declared feeling confident in applying basic Accounting concepts in managerial decisions. The perceived difficulty among the students relied in the fact they consider Accounting subjects complex in terms of content, despite they consider such subjects very useful in terms of knowledge of administrators. Referring monitoring, there has been a low interest by the students, who stated not looking for monitors although they were available to assist them in their doubts, and most of students consider monitoring not fundamental in the process of learning.

Undergraduate students reach to the conclusion that Accounting subjects do matter for their knowledge, as they are related to other subjects from Business Administration superior course, reinforcing the interdisciplinarity among such subjects, as well as the recognition that Accounting provides the ability to deal with the company's data, in a way to understand its characteristics and mastering both theoretical and practical approach.

Therefore, the present study contributes to an investigation based on actual undergraduate scenario in Business Administration courses in their structure, especially in the possibility to reflect on the way Accounting subjects are being taught for non-accountant students. Besides all this, the results obtained from this research work may be used by professors of Accounting who work at Business Administration courses.

This study has some limitations regarding the fact the questionnaires could not be responded for students enrolled in the five superior institutions located in Campina Grande, Paraiba, and the sample was obtained from only three of those, since two institutions did not authorize the application of the questionnaires. This also reflects on the small number of elements in relation to the universe, even it was possible to get 111 respondents, attending the requirements proposed by Hair *et al.* (2009). Nevertheless, it is not convenient to generalize the results to all population in the study, but only to the elements integrating the sample. As a suggestion for further investigations, we

recommend the expansion of this research work in national context, with similar goals and the use of other multivariate statistic tools, as we suggest deeper qualitative analysis, such as the analysis of the content of the syllabus of Accounting subjects from a Business Administration superior course.

References

ALVARÃES, A. C. T.; LEITE, L. S. Práticas pedagógicas no curso superior de Administração: uma abordagem transdisciplinar e o processo ensino-aprendizagem. *Cadernos Escola de Negócios*, v.7, p. 1-20, 2009.

AKTOUF, O. Ensino de administração: por uma pedagogia da mudança. *Revista de Administração de Empresas*, v. 12, n. 35, p. 151-160, out. /dez. 2005.

AZEVEDO, C. E. F. *et al*. Por que Finanças? Avaliando o Interesse dos Estudantes de Graduação em Administração pela área de Finanças. *III EnEPQ*, João Pessoa/PB, 2011.CD-ROM

BERTERO, C. O. A evolução da análise organizacional no Brasil (1961-93). *RAE: Revista de Administração de Empresas*. V.34, n.3, mai-jun, p.81-90, 1994.

BIANCHI, M. *et al*. Disciplina de Contabilidade Introdutória: características das instituições, cursos, docentes e perfil do discente não contador. *Enfoque Contábil*, v. 29, n.2, p. 64-82, maio- agosto, 2010.

BORGES, G. F. *et al*. Ensino de Contabilidade: uma análise da produção científica nacional sob a perspectiva da bibliometria e sociometria. *XII Congresso USP de Contabilidade e Controladoria*, São Paulo/SP, 2012.

BORGES, G.F.; NAVES, F. Ensino de contabilidade na graduação em administração: uma análise sob a perspectiva discente. *Rev. Cont Org*: v. 21 p. 58-70, 2014.

BRASIL. Ministério da Educação (MEC) – Conselho Nacional de Educação (CNE). *Resolução CNE/ CES n °. 4, de 13 de julho de 2005.* Diário Oficial da União, Brasília, 19.06.2005, Seção 1, p.26. Disponível em: <http://portal.mec.gov.br/cne/ arquivos/pdf/rces004_05.pdf>. Acesso em: 28 de setembro de 2016.

CECCONELLO, A. R. *Identificação e análise dos fatores críticos de sucesso no ensino de Contabilidade para não contadores em cursos de pós-graduação em Administração, lato sensu: categoria MBA, na cidade de São Paulo*. 222 p. 2002. Dissertação (Mestrado em Controladoria e Contabilidade Estratégica) – Centro Universitário Álvares Penteado. São Paulo, 2002.

COOPER, D. R.; SCHINDLER, P. S. *Métodos de pesquisa em Administração*. 7. ed. Porto Alegre: Bookman, 2003.

CORRAR, L. J.; PAULO, E.; DIAS, J. M.; FILHO. *Análise Multivariada*: para cursos de administração, ciências contábeis e economia. São Paulo: Atlas, 2011.

COSTA, F. J. *et al.* Interesse e atitudes dos estudantes de Administração em relação à área contábil. *Revista de Educação e Pesquisa em Contabilidade*, v. 5, n. 1, p. 99-120, janeiro-abril, 2011.

FIELD, A. Descobrindo a estatística usando o SPSS. 2. ed. Porto Alegre: Artmed, 2009.

FISCHER, T. Difusão do conhecimento sobre organizações e gestão no Brasil: seis propostas de ensino para o decênio 2000/2010. *RAC: Revista de Administração Contemporânea*, Edição especial, p. 123-139, 2001.

HAIR JR., J. F.; BLACK, W. C.; BABIN, B. J.; ANDERSON, R. E.; TATHAM, R. L.*Análise multivariada de dados*. Tradução de: Adonai Schlup Sant′Anna. 6. ed. São Paulo: Bookman, 2009.

HARADA, R. S. *O ensino da contabilidade no curso de administração de empresas: percepção de docentes da disciplina de contabilidade geral em faculdades localizadas no município de São Paulo*. 109 p. 2005. Dissertação (Mestrado em Controladoria e Contabilidade Estratégica) – Centro Universitário Álvares Penteado. São Paulo, 2005.

LAFFIN, Marcos. Projeto Político-pedagógico nos Cursos de Ciências Contábeis. *Revista Brasileira de Contabilidade*, São Paulo. Jul-ago. 2004.

MALHOTRA, N. K. *Pesquisa de marketing*: uma orientação aplicada. 6. ed. Porto Alegre: Bookman, 2012.

MARCONI, M. A.; LAKATOS, E. M. *Técnicas de pesquisa*: planejamento e execução de pesquisas, amostragens e técnicas de pesquisa, elaboração, análise e interpretação de dados.6. ed. São Paulo: Atlas, 2006.

MARION, J. C. *Contabilidade Empresarial*. São Paulo: Atlas, 2007.

_____. *Contabilidade empresarial*. 6.ed. São Paulo: Atlas. 1997.

MAROCO, J. *Análise estatística com utilização do SPSS*. Lisboa: Edições Sílabo, 2003.

MOTTA, F. C. P. A questão da formação do administrador. *RAE: Revista de Administração de Empresas*. Rio de Janeiro, v. 23, n. 4, p. 53-55. Out./dez, 1983.

NAVES, F. L.*et al.* Ensino - Aprendizagem numa perspectiva crítica: relatos de uma experiência. *Revista de Administração da Mackenzie*, v. 13, n. 1, p. 40-67, Jan-Fev, 2012.

OLIVEIRA, F. B.; SAUERBRONN, F. F. Trajetória, desafios e tendências no ensino superior de administração e administração pública no Brasil: uma breve contribuição. *RAP: Revista de Administração Pública* [online]. vol.41, n.spe, pp. 149-170. ISSN 0034-7612, 2007.

PADOAN, F.A.C.; CLEMENTE, A. A interdisciplinaridade no ensino da Contabilidade: um estudo empírico da percepção dos docentes. In: CONGRESSO USP DE CONTROLADORIA E CONTABILIDADE, 6, 2006, São Paulo. *Anais*... São Paulo: USP, 2006, v. 6, p. 1-15

RAUPP, F. M. *et al.* O ensino de Contabilidade Geral e Contabilidade de Custos nos cursos de graduação em Administração do Estado de Santa Catarina. *Revista de Negócios*, v. 14, n. 2, p. 71-88, Abr-Jun, 2009.

SANTOS, E. S. Objetividade X Relevância: o que o modelo contábil deseja espelhar? *Caderno de Estudos*, São Paulo, FIPECAFI, v. 10, n.18 – maio/agosto 1998.

TCHEOU, H. *Avaliação do ensino de contabilidade nos cursos de administração de empresas na cidade de São Paulo*. 215 p. 2002. Dissertação (Mestrado em Controladoria e Contabilidade Estratégica) Centro Universitário Álvares Penteado, São Paulo, 2002.

VERGARA, S. C. *Projetos e relatórios de pesquisa em administração*. 10. ed. São Paulo: Atlas, 2009.

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