

ACCOUNTING PROFESSOR QUALIFICATION IN DIGITAL AGE: A PERCEPTION STUDY ON BRAZILIAN PROFESSORS

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ABSTRACT

This paper aims at analyzing the perception of Accounting professors about the necessary qualifications in Accounting undergraduate courses. The contribution of this study is to theoretically discuss the education of Accounting professors, with empirical data, because Accounting teaching requires specific competencies in the digital area. The research is applied in the Accounting Higher Education, descriptive in relation to the objectives, a qualitative approach to the problem with quantitative elements for descriptive data analysis. The technical procedure was the survey by online questionnaire via Google Forms. The research population are professors of the Accounting professional education in undergraduate courses in Brazil. The sample consisted of 378 professors, selected by the representativeness and typicality criteria. The results evidenced the perception of professors about the complexity of Accounting teaching, by applying a set of professional, academic and pedagogical competencies as well as practical knowledge about the accounting practice and teaching. However, they indicated the prevalence attributed by professors to the technical competency and professional practice knowledge over the other educational competencies. The professors showed feeling of deficiency in relation to the academic education received and they worried about the need for continuous training. They also prove, with empirical data, that mastering contents by Accounting professors is not enough to the teaching practice in Accounting courses. The results obtained in this paper may support institutional policies regarding continuous education of professors in Accounting undergraduate courses as well as the proposition of initiatives to develop them systematically by the education institutions.

KEYWORDS

Accounting Professor. Accounting Education. Professor education. Teaching Competencies.

1. INTRODUCTION

The education of professors in contemporary societies is based on a complex combination of scientific, pedagogical and technical contributions, generally built from within the profession (Nóvoa, 2009). The teaching practice in Accounting involves the relationship between theory and practice, as well as the constant changes that affect the academy. It also involves the preparation for a variety of functions to be developed by their future professionals (Nossa, 1999; International Federation of Accountants, 2001). Such fact represents an important challenge to these professors (Miller and Becker, 2010). Therefore, they require a debate and actions regarding the education of professors involved in the Accounting Education process (Miller and Becker, 2010; Miranda *et al.*, 2012), by the Higher Education Institutions of all countries.

The Accounting professor must have technical and accounting knowledge, as well as some knowledge of related areas, teaching methodology, general culture and social aptitudes, in addition to the ability of constant integration of the various social, political, economic and legal phenomena in their pedagogical practice (Nossa, 1999). Such education is expected to mainly emphasize the professor's reflection on his/her own practice (Kraemer, 2005; Ramalho *et al.*, 2013). Laffin (2002) points out that didactic-pedagogical issues have not been considered as fundamental in the education of Accounting professors, by the post-graduation programs in Brazil. The pedagogical theoretical basis would help teachers to reflect on their daily practice.

Hernandes *et al.*, (2006) reinforce the need of an education based on the reflection on the theory, so that accounting professors may encourage their students with critical thinking. Thus, according to Silva (2000) the Accounting professor needs to care for his/her teaching competency through updates and *stricto sensu* education (master's degree and/or PhD), in order to develop the assimilation conditions of new management forms within the growing expansion of the professional practice. As a support, the recommendations for academic training of professors in the accounting area "requires a combination of original academic preparation (*stricto sensu* education) in addition to follow-up activities that maintain or establish preparation for current teaching responsibilities " (Association to Advance Collegiate Schools of Business, 2010, p. 43). However, a weak academic education at *stricto sensu* post-graduation level of professionals in the area is observed in the Brazilian labor market (*Conselho Federal de Contabilidade*, 2013), and such fact may cause an effect on the qualification of the contingent professors of Accounting undergraduate courses in Brazil.

In this sense, what are the necessary qualifications for the teaching practice in Accounting undergraduate courses? The objective of this study is to investigate the perception of professors of the professional education area about the necessary qualifications for the teaching practice in Accounting undergraduate courses in Brazil.

Swain and Stout (2001) surveyed graduates from 73 accounting doctoral programs in the United States. The researchers evaluated the individual development needs regarding the teaching process. The respondents pointed out having received minor pedagogical training during the doctoral program and that they had developed them mainly through self-training (Swain and Stout, 2000).

Another studies (Slomski, 2008; Miranda *et al.*, 2012; Vendruscolo and Behar, 2014; Vendruscolo and Bercht, 2015) surveyed the pedagogical practice of professors in Accounting undergraduate courses offered by Brazilian Higher Education Institutions. The results revealed in the study indicate they arise from the "initial and continuous education of professors, curriculum and school socialization, knowledge of the courses to be taught, professional experience, personal and professional culture, peer learning etc." (Slomski, 2008, p. 3). "Teaching requires professional education for its practice: specific knowledge to appropriately practice it or, at least, the acquisition of knowledge and skills related to the teaching activity in order to improve its quality " (Slomski, 2008, p. 3). Thus, the teaching knowledge have a temporal and social character and leads to acquired and perfected processes within the practice and teaching career in the Accounting area (Slomski, 2008).

Miranda *et al.* (2012) observed the qualifications of Accounting professors in three teaching education cores: academic qualification, professional qualification and pedagogical qualification. The professional qualification is related to the current accounting practices in the professional and pedagogical practice, to the systemic preparation for the teaching practice, whose knowledge arising from such qualifications pointed out in the study were: mastering the content, experience knowledge and didactic knowledge, respectively. The qualification component factors ascertained by the author are described in Table 1.

Table 1. Accounting teaching qualification component factors

| Professor's Qualification | Component Factors |
|----------------------------|---|
| Academic qualification | The PhD degree (preparation for research), master's degree, specialist, acting as referees or reviewers of scientific journals, exclusively acting at Higher Education Institutions, having papers published in scientific journals, participating in research associations or bodies. Thus, it was considered that the academic qualification should concern the teaching preparation for the practice of research on the issues he/she teaches. |
| Professional qualification | The accounting professional practice; as a consultant, advisor or referee; participation in professional associations or regulatory agencies; development of applied research involving the academy and the community; and the participation in projects of university extension programs with the involvement of the community. |
| Pedagogical qualification | Offer of teaching training programs; support to the teaching participation in research projects and scientific events; support to the teaching participation in <i>stricto sensu</i> courses offered by other Higher Education Institutions; promotion of scientific events contemplating teaching; have a <i>stricto sensu</i> , <i>lato sensu</i> and extension pedagogical education courses; teaching-related research projects; and teaching experience. |

Source: Miranda *et al.* (2012).

Vendruscolo and Behar (2014) investigated the professors' competencies elements (knowledge, skills and attitudes) in Accounting undergraduate course. The authors have not identified a consensus on the literature about the pedagogical competencies of professors. The studies about the education of Accounting professors are recent and were tangent to the teaching competencies issue. They have not mapped them or identified their elements, not even approached how to develop them. However, in general, the presence of the three constitutive elements of competencies is observed: knowledge, skills and attitudes (Vendruscolo and Behar, 2014).

Vendruscolo and Bercht (2015) have analyzed the perception of affective aspects in their pedagogical practices, with 96 accounting undergraduate professors in Southern and Southeastern Brazil. The study data evidenced that Accounting professors do not adopt pedagogical practices through Accounting Information Technology, compatible with the distance education, revealing the training need in information technology.

Thus, the contribution of this study is to theoretically discuss the education of Accounting professors, with empirical data, in order to produce more concrete answers, contributing to the mediation between the new base of the social reality and the requirements of specialized professionals to act in the organizations, in order to meet the evolutive challenges of society.

2. METHODOLOGICAL PROCEDURES

The research is applied to the higher education in Accounting. Based on the approach, the research may be classified as qualitative, since it represents an interpretative analysis of the collected empirical data and with quantitative elements for the descriptive analysis of data (Gil, 2007; Creswell, 2010). In relation to the objectives, it is descriptive. The technical procedure adopted was the survey through the online questionnaire via Google Forms, characterized by the direct questioning of the subjects whose behavior was expected to know and determine the characteristics and opinions of the study population (Gil, 2007).

The respondents were 378 Brazilian professors, selected using non-probabilistic sampling through the typicality criterion: being professor in Accounting undergraduate courses and teaching professional education courses within the course's program. The collection instrument contemplated the objectives of the research, the voluntary participation statement and the authorization for disclosure of the research anonymous data. In order to guarantee anonymity along the research, no name or identifying data of the respondents were disclosed. The denomination P_n was adopted, where "P" refers to the respondent professor and "n" corresponds to the sample order number in the data base.

The data collecting instrument was organized in multiple choice questions, from the Likert scale (Likert, 1975; Günther, 2003), in order to capture the perception of the research respondents in relation to the qualifications of a professor regarding the accounting teaching function for professors in Accounting undergraduate courses. The scales were: Essential, Very Important, Important, Of little Importance and Irrelevant.

3. RESULTS AND DISCUSSION

The analysis processes and data interpretation obtained by the survey technical procedure are shown.

3.1 Profile of the Research Respondents

In all Brazilian regions, most professors are male (64% of the participants). In the Northeastern and Northern regions this participation was even more expressive, with 67.4% and 76.5%, respectively. Out of the total of respondents, 74.6% are under 50 years old and 25.4% are older than 50 years. The age group with the largest concentration in all regions is between 41 and 50 years. Approximately, 53% of the professors act at private Higher Education Institutions, compared to 44.7% of public Higher Education Institutions, while 2.1% act in both. The regions with the highest presence of professors acting at private Higher Education Institutions are the Southern (63.3%) and Southeastern (67.3%) regions. This situation is inverted in the Center-Western

(64,1%), Northeastern (83,7%) and Northern (58,8%) regions, where the public institutions are more representative in the sample.

The predominant academic education (78,8%) of the professors who responded the survey was Bachelor of Accountancy Science, in all regions. The Northern region stands out (94,1%), followed by the Center-Western (90,5%) and Northern (88,4%) regions. Professors from related areas represent 17,2% of participants and Other Knowledge Areas, represent around 4%. This participation is more influenced by the Southern (16,9%) and Southeastern (24,5%) regions. It has also been observed that 4% of the participants have double education, generally in accounting-related areas.

In relation to the qualification of the sampled professors, 24,3% have a PhD (8,2% with post-doctorate) and 51,9% are concentrated in the Master's Degree – of these, 18% are currently enrolled in PhD programs. Thus, 76,2% of participants have the minimum title required by the Brazilian Ministry of Education for professional activity in undergraduate courses. This characteristic was similar in all regions, with emphasis placed on the Center-Western region, with a higher participation (85,7%), and the Northeastern region, with a lower participation (69,8%). Among professors with the minimum qualification of PhD, 71% are from public Higher Education Institutions, 61% of them are men and 39% women.

The teaching experience resulted more uniform among the intervals analyzed. Most professors (65,3%) in the sample had up to 15 years of teaching experience. The largest contingent was in the interval between 5 and 10 years, with 23,8% of the total. The interval between 15 and 30 years contemplates 29,9% of the professors. The sample also contains professors (4,8%) with more than 30 years of teaching experience. Confirming the theoretical references, 78,6% of professors have professional experience, in addition to the teaching practice. However, 21,4% only work as professors, mainly represented by professors who work at public Higher Education Institutions (61,7%). The research of *Conselho Federal do Rio Grande do Sul* pointed that 4,8% of Accountants also work as professors (*Conselho Federal do Rio Grande do Sul*, 2013).

3.2 Data Analysis

Professors were consulted about the importance of qualifications and practical knowledge, necessary for the teaching function in Accountancy. The result obtained is indicated in Table 1, by scales.

Table 2. Perception of respondents about the Qualifications of Accounting professors

| Qualification and Knowledge | Essential | | Very Important | | Important | | Of Little Importance | | Irrelevant | | Total <i>Fr</i> |
|------------------------------------|-----------|------|----------------|------|-----------|------|----------------------|-----|------------|-----|--------------------|
| | <i>fr</i> | % | <i>fr</i> | % | <i>fr</i> | % | <i>fr</i> | % | <i>fr</i> | % | |
| Technical Qualification | 245 | 65,3 | 91 | 24,3 | 41 | 10,9 | 1 | 0,3 | 0 | 0,0 | 378 |
| Pedagogical Qualification | 136 | 36,3 | 153 | 40,8 | 83 | 22,1 | 5 | 1,3 | 1 | 0,3 | 378 |
| Academic Qualification - Masters | 106 | 28,3 | 161 | 42,9 | 89 | 23,7 | 17 | 4,5 | 5 | 1,3 | 378 |
| Academic Qualification - Doctorate | 53 | 14,1 | 138 | 36,8 | 142 | 37,9 | 33 | 8,8 | 12 | 3,2 | 378 |
| Practical knowledge of Professors | 159 | 42,4 | 158 | 42,1 | 57 | 15,2 | 3 | 0,8 | 1 | 0,3 | 378 |
| Practical knowledge of Accountants | 164 | 43,7 | 144 | 38,4 | 64 | 17,1 | 6 | 1,6 | 0 | 0,0 | 378 |

Technical Qualification was indicated as Essential (65,3%) and Very Important (24,3%) in the perception of 336 professors, representing 88,9% of participants. Practical knowledge as professors was considered by 83,8%, as Essential (43,7%) and Very Important (38,4%) and as Accountants by 81,4%. The empirical data show that the sample teachers attach greater importance to the technical qualification and professional experience if compared to the others. Such importance can carry a greater weight in their continuing education, instead of the pedagogical and technological skills required in the teaching profession in the digital age. The market has required increasingly technically qualified professionals, but also shows a diversification of skills developed in their academic studies. In this regard, extensive training, covering the development of teaching skills result in a more significant contribution.

The consideration of one of the respondents to the research illustrates the point of view of professors in relation to the importance of technical qualification and knowledge of the specific area:

P52 "For the good teaching of the accounting practice, the technical disciplines must be taught by professionals who work in the area. As we no longer have technical accounting courses, the Higher Education Institutions must prioritize the technical education (Accounting, Fiscal, Asset and HR bookkeeping) until the 5th period and professional disciplines should be taught from the 6th period on. The disciplines of accounting practice should be taught in computing laboratory with specific software".

On the other hand, Pedagogical Qualification was considered Essential (36.3%) and Very Important (40.8%), by 289 respondents (76.5%) and Important by another 22.1%, totalizing 98.4% of participants. Data evidence that professors also consider pedagogical qualification relevant to the teaching practice in Accounting Science. It is observed with even greater significance given the technical knowledge that the consulted teachers also recognize the importance of Pedagogical Qualification. This involves knowledge, skills and specific attitudes, related to each other that enable teachers in conducting the process of teaching and learning accounting and enable a reflection on their practice.

As stated in the literature review, the professor of Accounting courses did not receive academic training envisaging the needs for the teaching practice. Professors have been developing them in their own practice, which this study ratifies with empirical data. Professors have verbally expressed the comments indicated in Table 3.

Table 3. Comments of respondents on the received academic training

| Professor | Comment |
|-----------|--|
| P186 | The undergraduate professor must share practice and teaching in order to develop competencies. |
| P258 | The classroom is always a challenge, since in some classrooms a methodology works and in others the same methodology doesn't, so professors should find these competencies and feel which methodologies should be applied in each classroom, discipline and each content. |
| P363 | The professor, in his/her deepest essence, should be bound to the complex cognitive-pedagogical process of their students, searching to constantly improve his/her methods, in order to obtain a different, unique, process from his/her creativity, adapted to his/her personal dimensions. In other words, he/she should develop his/her own creative methodology, by applying a set of knowledge and experiences which expand as his/her teaching experiences accumulate. Experience improves it when he/she uses time as an extension process of the experiences he/she practiced. |

The comments of Accounting professors evidence the construction and development of their teaching competencies are attributed to the practice, trial and error, sharing of experiences with colleagues. Change in their methodologies through experience. They attribute to their teaching experience the constant improvement of their methods, without necessarily being aware of the process.

By analyzing the comments, in the light of the Genetic Epistemology Theory (Piaget, 1975), they demonstrate the occurrence of a cognitive imbalance resulted by the "classroom" assimilation process. A beginning of awareness occurs by observing the need for change in action schemes (methodologies), as cited by P258 "in some a methodology works while in others the same methodology doesn't". So, in an attempt to assimilate the object, the professor needs to modify their action (accommodation process): P258 "find these competencies and feel which methodologies should be applied in each classroom, discipline and each content". By doing this, professors develop cognitive structures in order to assimilate the object, developing their teaching competencies, even if they are not completely aware of the process.

In relation to the Academic Qualification for the function of Accounting professor, the Master's degree received a higher weight (70.6%; 267 respondents) if compared to the Doctorate degree (50.5%; 191 respondents), considering the Essential (28.3%) and Very Important (42.9%) scales. This result may be related to the qualification of the respondents, which indicated that 51.9% (196) have a maximum qualification of Master and 24.3% of PhD, or even to the parameters required by the Brazilian Ministry of Education. In this aspect, the voluntary comments of participant professors give an idea of the meaning attributed to the professor education, as shown in Table 4.

Table 4. Comments of respondents about academic qualification

| Professor | Comment |
|-----------|--|
| P148 | I believe higher education teaching lacks training of teaching techniques. We leave the Master's and Doctorate degrees as researchers and have little or no teaching practice. Therefore, during the first teaching years we tend to reproduce the old board/marker system to pass on knowledge. I notice that even being aware of such change in the teaching techniques, only a few professors adopt or have autonomy to apply them. I think there is a lack of training, courses and sharing of experiences among professors. |
| P94 | The institution where I work ignores the need for training professors for a better performance in their classroom. I need training and I see my colleagues need it too. But I believe this training should be partly optional, and partly obligatory and periodical. |
| P220 | The Accounting Higher Education Institutions need to improve a lot with new Technologies and professionals with a good qualification in order to train competent professionals for the labor market. |

The feeling of deficiency in relation to the academic education received and the need for continuous training is expressed through the comments of professors in digital area. The concern of professors about the systematization of periodical training may also be observed, which could be provided by the Higher Education Institutions where they work. Professor P148 indicated that the academic qualification prepares the professor for research and not for the teaching practice and that professors adopt the modelling process for the conduction of their pedagogical practices.

The results indicated the prevalence attributed by professors to the technical qualification and professional practical knowledges about the other teaching qualifications. However, they have attributed relevant weight to all of them, once almost all respondents scored up to the Important scale. This denotes a perception by professors of the complexity of the teaching practice in Accountancy. They also prove, with empirical data, what had been noted in previous studies, that is, that mastering contents by Accounting professors is not enough to the professional training in the accounting area.

4. CONCLUSION

The analysis results of empirical data contributed to reinforce the need for an academic education that envisages the practice requirements of professors and emphasize the need for a continuous education. Similarly, considering the social context of Accounting undergraduate professors' practice, they revealed the feeling of deficiency in relation to the academic education received and the concern of professors about the systematization of periodical training which could be provided by the Higher Education Institutions where they work. Therefore, the Higher Education Institutions need to reflect on the pedagogical models adopted by *stricto sensu* Accounting courses in Brazil.

The study indicated, also, that the professors adopt the modelling process for the conduction of their pedagogical practices. The academic qualification prepares the professor for research and not for the teaching. Mastering the contents is not enough for the teaching practice in Accounting courses. This denotes a perception by professors of the complexity of the teaching activity in Accountancy in digital area.

Considering the respondents to the research are related to classroom courses and teach most disciplines only in this modality, we understand that further studies should be carried out with Accounting professors who teach in distance education. Specific research with respondents from distance education courses is recommended. As pointed out by Minayo (1994), in Social Sciences research, the social context must be considered due to the nature of this knowledge field, whose social education and configuration are specific.

The results obtained in this paper may support institutional policies related to the continuous education of Accountancy undergraduate professors and the proposition of initiatives to develop them systematically.

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