Professional ethics and accounting students: analysis of the intervening variables

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Abstract  
This study aims to evaluate how accounting students perceive professional ethics considering variables linked to individual factors. In terms of methodology, this was a quantitative and exploratory study, and included a cross-sectional questionnaire. The sample represented 455 students at an IES in the southern region of Brazil. Data were analysed with non-parametric Spearman, Kruskal-Wallis and post hoc Dunn-Bonferroni tests. The results show non-religious, under 25-year-old female students working in the financial/accountant field, academically mature and who have studied ethics have individual factors towards more ethical significant attitudes. Furthermore, the professional law and ethics course in the accounting programme affects future professionals’ ethical conduct. Therefore, the individual factors analysed in this study, and the ethical education, significantly influence accounting students’ ethical attitudes. However, this assumption refers solely to this study analysis, because the literature review shows multiple results in other regions.


Ética profissional e estudantes de contabilidade: análise das variáveis intervenientes

Resumo  
Este estudo objetiva avaliar e compreender a percepção de estudantes de contabilidade sobre ética profissional, considerando as variáveis intervenientes vinculadas aos fatores individuais. O método utilizado classifica-se como quantitativo, exploratório e survey, com aplicação de questionário fechado por meio de critério transversal. A unidade amostral representa 455 estudantes de uma instituição de Ensino Superior (IES) do Sul do Brasil. Os dados foram analisados com auxílio dos testes não paramétricos Spearman, Kruskal-Wallis e post-hoc Dunn-Bonferroni. Os resultados apontam que os fatores individuais, que diferem em relação à existência de atitudes mais éticas, significativas, são dos estudantes do sexo feminino, com idade até 25 anos, não religiosos, que atuam na área financeira/contábil, com maturidade acadêmica e educação ética. Além disso, a disciplina Ética e Legislação Profissional no curso de contabilidade teve impacto essencial na conduta ética dos futuros profissionais. Portanto, os fatores individuais, analisados neste estudo, e a educação ética influenciam significativamente nas atitudes éticas dos estudantes de contabilidade. Entretanto, essa afirmação trata apenas da unidade de análise deste estudo, pois a comparação de resultados da literatura indica resultados múltiplos em outras regiões.

Keywords: Ética profissional. Contabilidade. Ética. Educação.

Ética profesional y estudiantes de contabilidad: análisis de las variables intervinientes

Resumen  
Este estudio tiene como objetivo evaluar y comprender la percepción de estudiantes de contabilidad acerca de la ética profesional, considerando las variables intervenientes vinculadas a los factores individuales. El método utilizado se clasifica como cuantitativo, exploratorio y survey, con aplicación de un cuestionario cerrado por medio de criterio transversal. La unidad de muestreo representa 455 estudiantes de una institución de Educación Superior (IES) del sur de Brasil. Los datos fueron analizados con auxilio de las pruebas no paramétricas Spearman, Kruskal-Wallis y post-hoc Dunn-Bonferroni. Los resultados señalan que los factores individuales, que se distinguen con relación a la existencia de actitudes más éticas, significativas, son de los estudiantes del sexo femenino, de hasta 25 años de edad, no religiosos, que actúan en el área financiera/contable, con madurez académica y educación ética. Además, la asignatura Ética y Legislación Profesional en el curso de contabilidad ha tenido un impacto esencial en la conducta ética de los futuros profesionales. Por lo tanto, los factores individuales analizados en este estudio y la educación ética ejercen significativa influencia en las actitudes éticas de los estudiantes de contabilidad. Sin embargo, esta afirmación se refiere solamente a la unidad de análisis de este estudio, pues la comparación de resultados de la literatura indica múltiples resultados en otras regiones.


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INTRODUCTION

Accounting practice is essential in the support of the economic system at the global level, as it generates information that assists in the various stakeholder decisions. Thus, the healthy economic system requires accounting professionals committed to ethical and moral values (DAVOODIFAR, 2015). Anzeh and Abed (2015) point out that any unethical conduct in accounting practice will, in any way, cause failures in the economic system. However, numerous corporations that integrate or integrated this economic system have placed the integrity of the accounting professional in question due to the effectiveness of governance, the quality of the information generated and the credibility of the audit (RAO, FRIEDMAN and COX, 2009; ROCKNESS and ROCKNESS, 2010; BAYOU, REINSTEIN and WILLIAMS, 2011, OTALOR and EIYA, 2013, KERMIS and KERMIS, 2014).

The media, in Brazil, publishes news about unethical conduct by government and businessmen, especially in the accounting area, who practice fraud, evasion and manipulation of public funds, causing losses to society (MORAES, SILVA and CARVALHO, 2010; OLIVEIRA, JESUS, SILVA et al., 2014). In this sense, fraud leads to a lack of confidence in the accounting/financial information, which brings to discussion ethical education in accounting, directed to improving the practices used in the face of ethical dilemmas (MELE, 2005; RAO, FRIEDMAN and COX, 2009; ROCKNESS and ROCKNESS, 2010; KERMIS and KERMIS, 2014). Therefore, one of the main concerns in relation to accounting professionals is to improve their reasoning and ethical behavior (SENSENS, MILLER and CABE, 2015).

Ethics education has been suggested as an alternative to promote ethical awareness and decision making (JACKLING, COOPER, LEUNG et al., 2007), and is considered a kind of essential antidote to bad accounting practices. Although ethical education is addressed in the literature, it remains unexplored in most accounting courses, especially in developing countries (SIMPSON, ONUMAH and OPPONG-NKRUMAH, 2015).

Similarly, the effectiveness of ethical education in accounting has become the guideline of several studies, pointing to mixed results in terms of improving students’ moral reasoning (SORENSEN, MILLER and C Abe, 2015).

The ethical issues can be discussed in the academy by students (LOPES, RIBEIRO FILHO, VASCONCELOS et al., 2006), however, they bring a set of conditions that accompany them from childhood and that influence their behavior (LISboa, 2010). It is worth emphasizing, therefore, that in accounting, in addition to ethical education, individual factors such as gender, age, professional experience, religiosity, ethnicity and educational level can also influence ethical conduct. In this context, this study aims to evaluate students’ perception of professional ethics and, in addition, to identify if these individual factors influence ethical attitudes. Likewise, the study tests whether there are significant differences among classes of individual factors in students’ ethical attitudes.

The contribution of this study is related to the advancement of empirical knowledge on the subject, since, when verifying the inclinations and the intervening variables that influence students’ attitudes, one can act preventively to intensify the ethical conscience, aiming at avoiding future deviations of conduct from the professional accountant. Furthermore, class organs, with the help of these results, can formalize events aligned to address the needs. With these contributions, future professionals can be better prepared to act honestly and transparently, thus increasing the credibility of the information generated by the accounting practice and generating positive impacts for the whole society.

**THEORETICAL FRAMEWORK**

**Brief background on professional ethics and accounting**

Ethics and morals are widely used expressions in everyday life, but their definitions are a difficult task (GUILHEM and FIGUEIREDO, 2008). Moreover, these expressions are commonly used as synonyms, because they are used in several social contexts (VAYAMHAM, 2003; LA TAILLE, 2010). Although ethics has an intimate connection with morality, they should not be confused (VÁZQUEZ, 2011). Guilhem and Figueiredo (2008) point out that this confusion between the terms began in large part with the various meanings of the primitive term *éthos* and its latin translation by *mos*, which can be understood as dwelling or shelter, character or nature and habits or customs. The understanding of ethics, in this study, derives from *ethos*, bound to habits, customs and traditions.

Ethics is distinguished from morality by the fact that it is understood as a philosophical discipline (rational and critical) as to right and wrong; Already morality comprises a set of values, principles and norms that govern human actions regarding behavior (VÁZQUEZ, 2011). Ethics is also understood in the field of philosophy as concerned with human behavior and the consequences of its attitudes (GITMAN and MCDANIEL, 2007, SMITH, CHAROKENSKONG and ELKASSABGI 2009, OTALOR and EIYA, 2013). In this sense, morality or ethics is considered abstract, since it relates to the part of philosophy applied to reflection on the foundations of moral life, such as norms and principles (GUILHEM and FIGUEIREDO, 2008).

Morality, in turn, encompasses norms, values, and beliefs that integrate a social process, in which one seeks to distinguish between right and wrong in terms of conduct (CRANE and MATTEN, 2004; KABIR, 2009). Guilhem and Figueiredo (2008) emphasize that individuals consciously and voluntarily assume the set of norms or rules of conduct to organize interpersonal relationships, based on moral values. Morality precedes ethics in certain points, because human attitudes and their consequences are analyzed based on the rational and critical philosophy to establish norms of conduct (CRANE and MATTEN, 2004).

By bringing the debate closer, it is possible to establish interfaces with the professional question.

In business, professional ethics is a moral-based standard of conduct, used to distinguish acceptable from unacceptable (FERREL, FREDRICH and FERREL, 2001). It can also be defined as a set of rules and principles that encompasses responsibilities among professionals, whether as colleagues, clients or society in general (OTALOR and EIYA, 2013). The ethical professional makes choices through the consequences of alternative actions, so the general guidelines of ethics can explain and lead to an understanding of their behavior (ONYEBUCHI, 2011).
The importance of professional ethics is related to the protection of professionals and clients, since it clarifies the responsibilities of the professional and improves their profile. It motivates and inspires practitioners. It guides acceptable behavior and improves the consistency and quality of ethical issues (OTALOR and EIYA, 2013). The professional ethics is essential in the conservation, security, enrichment, credibility, recognition, respect and success in the accounting profession (LISBOA, 2010; MORAES, SILVA and CARVALHO, 2010; MACHADO, ALMEIDA and SIMAO, 2012; DELLA, CEOLIN, NEUBAUER et al., 2015).

Accountants, besides professionals, are members of a society. In this sense, their behaviors and attitudes influence business and society in general (CRISTINA and FLORINA, 2008). The ethical conduct of this professional in the provision of accounting services contributes to the socioeconomic development and the making of own and client decisions (PIMENTA and SOUZA, 2014).

The objective of accounting science is related to the generation of information to stakeholders, a valuable source of wealth (SHINZAKI, CORRÊA and FERREIRA, 2005; IUDICIBUS, MARTINS, GELBCKE et al., 2010, MARION, 2012, OTALOR and EIYA, 2013). However, bad accounting professionals may occupy a position that makes it possible to manipulate / defraud financial statements, distorting the company’s economic reality, known as creative accounting.

Gowthorpe and Amat (2005) point out that creative accounting is mainly embodied in macromanipulation, which consists of regulators’ persuasion to develop regulations of interest to information preparers, and by micromanipulation, which consists in the preparation of accounting reports with partial information to demonstrate a view of the reality of the preparers themselves. From the perspective of ethics, such manipulations must be morally reprehensible as they are unfair to users of information, involve injustice of power and misrepresent regulators (Gowthorpe and Amat, 2005).

The quality of financial information is mainly affected by the auditors’ idiosyncrasies and corporate governance (KALBERS, 2009). In addition, monetary restatement of accounting information may trigger material and monetary errors / fraud in the financial statements and a possible failure to interpret accounting principles. In this sense, some attitudes may be considered unethical, rather than fraud or illegal acts (KALBERS, 2009). Furthermore, the impact of fraud / error in relation to financial reporting is not restricted to the limits of direct users (creditors and investors) and can affect the global economy, depending on the intensity of the fact (ROCKNESS and ROCKNESS, 2010).

Under this logic, it is essential that accounting professionals have an ethical commitment, since financial information is used in decision-making, thus contributing to the financial health of organizations and the well-being of society in general (CRISTINA and FLORINA, 2008). Moraes, Silva and Carvalho (2010) point out that, at the global level, there was an increase in the transparency and trustworthiness of the accounting information generated by professionals. Accounting activities can not be dissociated from ethical issues, therefore, in their implementation, the Code of Ethics of the Accounting Professional (CEPC) is encouraged, discouraging unethical conduct and promoting orientations in the face of ethical dilemmas (PARKER, 1994; SMITH, 2003).

THE CODE OF ETHICS AND ETHICAL DECISION-MAKING

The code of ethics was significantly driven by the tension between the autonomy of the professions and the public demands, aiming to provide a guide to professional conduct in ambiguous situations, that is, in ethical dilemmas (FRANKEL, 1989; LISBON, 2010). The content of the code of ethics is formulated by the collective, based on discussions of the professionals that make up a respective class (BORGES and MEDEIROS, 2007). Onyebuchi (2011) emphasizes that codes of ethics are subject to change over time, and it is necessary to revise and change them periodically, adapting them to socioeconomic and administrative environments, changes in legislation, among other factors.

In a broad sense, the purpose of the code of ethics includes the well-being of society, stimulating the honesty and integrity of organizations’ activities and endogenous and exogenous relationships (LISBON, 2010; LOPES DE SÁ, 2012). The
existence of the code of ethics contributes to the quality of the execution of the services or activities carried out, the improvement of the trust of interested stakeholders in front of services, the safety of professionals and clients and the defense of the dignity and independence of professionals (CRISTINA and FLORINA, 2008).

The CEPC, established by Resolution n. 803/1996, of the Federal Accounting Council (CFC), presents the ethical principles of the accounting profession. These regulate the conduct regarding duties, prohibitions, pricing criteria and penalties for their noncompliance. A code of ethics directly influences the conduct and judgment of accounting practices (ONYEBUCHI, 2011) and decision-making by accountants involves ethical dilemmas or conflicts (BOMMER, GRATTO, GRAVANDER et al., 1987).

Ethical dilemmas involve moral situations in which choices must be made on the basis of two similarly undesirable alternatives (FERNANDO, 2012). Moreover, such dilemmas may arise from various sources of behavior and attitudes. A dilemma can be considered ethical when, faced with the situation / problem, it satisfies three conditions (ALLEN, 2012): a) it is difficult to decide which solution is the best; b) there are different solutions; and c) the solution of the dilemma compromises some ethical principle. Situations / problems that do not require a choice, even if uncomfortable or that involve personal and professional values together, are not ethical dilemmas (ALLEN, 2012).

The solution of ethical dilemmas involves situations / problems whose decision rules are usually vague and conflicting, so it is not possible to predict them accurately or to know if they were correct (FERNANDO, 2012). According to Allen (2012), ethical dilemmas can be classified into two groups, namely: a) absolute or pure: when two or more ethical norms are applicable, however, they are in mutual conflict; b) approximate: when situations involve conflicts among values, policies and laws.

Decision-making based on ethical principles includes the application of ethical guiding guidelines, considering the interaction of a set of ethical norms in the solution of the dilemma (LOYENS and MAESSCHALCK, 2010). The decision is considered ethical if it considers positive or negative consequences to other individuals, societies or organizations. Thus, Kohlberg (1969) emphasizes that cognitive development influences decision-making and, according to Campos, Greick and Vale (2002), the individual who has the capacity to evaluate their attitudes also has the capacity to exercise ethics.

According to Kish-Gephart, Harrison and Treviño (2010), the intervening variables that must be observed in relation to the result of the ethical decision making by professionals are related to: 1) individual characteristics (cognitive-evolutionary morality, relativism, machiavellianism, locus of control, job satisfaction, sex, age and level of education); 2) characteristics of the moral issue (concentration of effects, magnitude of consequences, probability of effects, closeness, social consensus, temporal immediacy and general moral intensity); and 3) characteristics of the organizational environment (egoistic ethical climate, benevolent ethical climate, ethical climate with principles, ethical culture, code of conduct and code execution).

In addition, studies on this theme reveal that emotions, both positive and negative, influence the ethical choice of professionals (CONNELLY, HELTON-FAUTH and MUMFORD, 2004). The negative humor of professionals interferes with their intention to report unethical actions (CURTIS, 2006), and professionals with a higher degree of commitment to the activities they carry out are less likely to engage in unethical attitudes (CULLINAN, BLINE, FARRAR et al., 2008). The demographic / individual gender variable receives more attention in the empirical researches in the field of ethics, to the detriment of the other variables (O’FALLON and BUTTERFIELD, 2005; CRAFT, 2013).

**ETHICS EDUCATION IN ACCOUNTING**

Ethical education is considered essential in the development of professionals and other individuals in society (GIBSON, 2002; PROCARIO-FOLEY and McLoughlin, 2003; O’LEARY, 2012). Educational institutions need a framework of values and ethical reasoning in specific disciplines, such as ethics in accounting, preparing students to be professionals with
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the capacity to make ethical decisions in the business world (PROCARIO-FOLEY and MCLAUGHLIN, 2003 BERNARDI and BEAN, 2006, GRAHAM, 2012). According to Rao, Friedman and Cox (2009), despite the increase in the efforts made in the literature on ethics education, its implementation in educational institutions is not seen from this angle. Anzeh and Abed (2015) point out that developed countries emphasize the inclusion of ethics disciplines, especially in the accounting course.

The major challenge of educational institutions, especially in business-oriented courses, is to subsidize students with moral values, since technical skills are no longer sufficient (FUERMAN, 2004). The teaching of ethics in university curricula presents at least two distinct views among researchers, students and professionals (RAO, FRIEDMAN and COX, 2009): a) teaching influences ethical conduct (BERNARDI and BEAN, 2006; PROCARIO-FOLEY and MCLAUGHLIN, 2003; O’LEARY, 2012); and b) does not influence the ethical conduct of the professional future (GUNDERSEN, CAPOZOLLI and RAJAMMA, 2008). In this sense, Bernardi and Bean (2006) and Graham (2012) defend the need for a deeper and broader ethical education rather than distinguishing the right and wrong acquired in the individual’s childhood, because, as environments change over time, personal values can also be changed.

Students of the accounting course, according to Bean and Bernardi (2006), Rao, Friedman and Cox (2009) and Melé (2005), should have understanding and ethical reasoning. Furthermore, Melé (2005) emphasizes that ethical education in accounting must simultaneously encompass knowledge about norms and principles, values (moral goods) and virtues. Therefore, this education, in accounting, aims to humanize students and generate a moral commitment of future accountants in front of society (ANZEH and ABED, 2015).

International empirical studies on ethics education in accounting courses demonstrate that: a) ethical education is beneficial, considering that the combination of methodologies has contributed to the more ethical responses by students analyzed after education, but the challenge is related to the application of the best teaching method (O’LEARY, 2009); b) real examples and case study should be used (ALAM, 1998); c) female students presented more consistent ethical attitudes towards males (BORKOWSKI and UGRAS, 1998; KELLER, SMITH and SMITH, 2007; PURNAMASARI, 2011) and older students presented the same results as younger students (BORKOWSKI and UGRAS, 1998); d) accounting students who had ethical education indicated an incremental learning regarding ethical attitudes towards other students (RAO, FRIEDMANN and COX, 2009); and e) the existence of differences between ethical standards in relation to gender and religiosity is positively related, as well as in terms of work experience and intellectual level (KELLER, SMITH and SMITH, 2007).

National studies on the students’ ethical perception of accounting for individual factors and ethics education reveal that: a) ethical precepts should comprehensively involve all teaching-learning processes of students (LOPES, RIBAIO FILHO, VASCONCELOS et al. 2006); b) women showed lower acceptance of certain behaviors, such as acceptance of gifts by purchasing managers, masked financial reports, compared to males (ANTONOVZ, ESPEJO, STEINER NETO et al., 2010); c) gender does not influence the students’ willingness to act (OLIVEIRA, JESUS, SILVA et al., 2014); d) as to the individual gender factor (the female gender showed a more ethical inclination); older people were the ones who chose the most ethical attitudes and as regards the working time factor, the more experienced students tend to be more ethical (MORAES, SILVA and CARVALHO, 2010); e) ethics, although considered an important factor in the professional environment, is difficult to apply; ethical education is considered as a means to achieve a greater critical perception of the students (LIMA, PRAZERES, ARAÚJO et al., 2014); f) moral judgment is consistent with the profile expected by the future accountant and greater among the students closest to the conclusion of the course (TRENTIN, DOMINGUES and CASTRO, 2008; DIEHL, FREITAS and MACAGNAN, 2011); g) knowledge about ethical issues is accentuated after studying the discipline of professional ethics (TRENTIN, DOMINGUES and CASTRO, 2008); and h) the fact that the teaching of ethics (normative, relative and questioned) to be influenced by the culture does not present significant differences in students’ perception (NASCIMENTO, BEZERRA, ESPEJO et al.2011).
METHODOLOGY

Type of research and population sample

The approach of this research is quantitative in relation to the phenomena in the process of data collection, treatment and analysis, based on statistical methods (RICHARDSON and PERES, 1985; MARCONI and LAKATOS, 2011). We quantified the information collected through a questionnaire, submitted to non-parametric statistical analysis techniques, such as Spearman correlation, Kruskal-Wallis test and Dunn-Bonferroni post-hoc test.

As for the objectives, this is a descriptive research, since it aims at identifying, recording and analyzing the characteristics, factors or variables that are related to the phenomenon or process (PEROVANO, 2014). The causal approach identifies, analyzes and explains the relationship between the causes and effects of a phenomenon to broaden generalizations and to relate and generate hypotheses or ideas (MARCONI and LAKATOS, 2011).

The descriptive nature in this study aims to test hypotheses to identify whether demographic variables such as gender, age, religion, professional experience, ethnicity and whether the fact that the research subject has studied the course on professional ethics have some relation to attitudes. Although the topic is in many national and international studies, it still lacks studies to form a consensus on the variables that interfere in the development of more ethical attitudes, especially of the accounting professional.

With regard to the technical procedure, this is a survey, since the data were obtained through the direct interrogation of a target population, usually with a questionnaire (Freitas, OLIVEIRA, SACCOL et al., 2000). The survey is characterized by the interest in using a quantitative approach to reach conclusions (GIL, 2012). It is justified by the adherence to the quantitative approach (BEUREN, 2009). The application of the survey through a questionnaire followed the steps described by Freitas, Oliveira, Saccol et al. (2000), i.e. sampling, instrument definition, application strategy and data analysis.

The population of this study comprised 620 accounting sciences students from the A / 2015 semester of a Higher Education Institution (HEI) in Rio Grande do Sul. The choice of this population is due to the fact that researchers work as teachers in this HEI and in this course, which facilitated the deepening and interpretation of the results. Sampling was defined in a stratified probabilistic manner proportional to the gender (Table 1), which allows all individuals of the population the same chances of participating in the research. In addition, the sample selected covers all the characteristics of the population in focus.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Proportional stratified sample</th>
</tr>
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<tbody>
<tr>
<td>Gender</td>
<td>Population (n)</td>
</tr>
<tr>
<td>Male</td>
<td>166</td>
</tr>
<tr>
<td>Female</td>
<td>454</td>
</tr>
<tr>
<td>Total</td>
<td>620</td>
</tr>
</tbody>
</table>

Source: Elaborated by the authors.

The survey sample totaled 455 students of the accounting sciences course. It is worth mentioning that all 620 students of this course were invited. This sample is significant, since the sample calculation shows that the confidence level is 99%, with a sampling error of 2.38%. The sample was satisfactory, because Freitas, Oliveira, Saccol et al. (2000) emphasizes that the samples usually used have a 95% confidence level, with a margin of error of up to 5%.

DATA COLLECTION, TABULATION AND ANALYSIS

The data collection with the students occurred through the survey with the application of closed questionnaires and the temporal definition was based on the transversal criterion.

The questionnaire was adapted from the studies of Diehl, Freitas and Macagnan (2011) and Nazário (2013) and is divided into two sections (Chart 1): 1) socioeconomic profile: questions 1 to 7; and 2) knowledge about professional ethics: questions
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8 to 16. This adapted questionnaire covers essential aspects in determining the professional ethics of the accounting student, and can also be used to compare the results.

The questionnaires were applied to students in the classroom and their completion occurred without the presence of the researcher. The application period was from June 6 to June 11, 2015. The questionnaires were reviewed, validated and tabulated in the Microsoft Excel program (Chart 1).

Chart 1
Issues and the nominal scale

<table>
<thead>
<tr>
<th>1. Student Gender</th>
<th>Alternatives</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nominal scale</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Student Age</th>
<th>Alternatives</th>
<th>Male</th>
<th>Female</th>
<th>3 1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternatives</td>
<td>Up to 20 years old</td>
<td>1</td>
<td>2</td>
<td>&gt; 35 anos</td>
</tr>
<tr>
<td>Alternatives</td>
<td>From 21 to 25 years old</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Alternatives</td>
<td>From 26 to 30 years old</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>From 31 to 35 anos</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Do you practice any religion?</th>
<th>Alternatives</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternatives</td>
<td>Yes (1)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Nominal scale</td>
<td>1 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<tr>
<th>4. Do you work in the accounting/financial area?</th>
<th>Alternatives</th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
<tr>
<td>Alternatives</td>
<td>Yes (1)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Nominal scale</td>
<td>1 2</td>
<td></td>
<td></td>
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<tr>
<th>5. Courses Credits?</th>
<th>Alternatives</th>
<th>Male</th>
<th>Female</th>
<th>3 1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternatives</td>
<td>1 to 10</td>
<td>1</td>
<td>2</td>
<td>&gt; 35 anos</td>
</tr>
<tr>
<td>Alternatives</td>
<td>11 to 20</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>21 to 30</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>31 to 40</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>41 a 49</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal scale</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. What is your ethnicity?</th>
<th>Alternatives</th>
<th>Male</th>
<th>Female</th>
<th>3 1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternatives</td>
<td>Portuguese</td>
<td>1</td>
<td>2</td>
<td>&gt; 35 anos</td>
</tr>
<tr>
<td>Alternatives</td>
<td>Italian</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>German</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>Polish**</td>
<td></td>
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<th>7. Do you study or have already studied Ethics and Professional Legislation?</th>
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<th>Female</th>
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<th>Female</th>
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<td>1</td>
<td>2</td>
<td>&gt; 35 anos</td>
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<td>Alternatives</td>
<td>Partially disagree</td>
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<td>3</td>
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<tr>
<td>Alternatives</td>
<td>Indifferent</td>
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<td>4</td>
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<tr>
<td>Alternatives</td>
<td>Partially agree</td>
<td>4</td>
<td>5</td>
<td></td>
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<tr>
<td>Alternatives</td>
<td>Totally agree</td>
<td>5</td>
<td></td>
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<td>Nominal scale</td>
<td>1 2 3 4 5</td>
<td></td>
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<td></td>
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</tbody>
</table>

Source: Elaborated by the authors.

Key: * 8. Does the course Ethics and Professional Legislation contribute to your professional training?; 9. Analyze the following problem: Does the accountant, in a situation in which customers do not pay the fees, can retain the books and documents as security for payment?; 10. Analyze the following problem: If the customer, a friend of the accounting professional, asked to change the company’s billing for the purpose of forwarding a loan to a financial institution, can this accounting professional increase the company’s sales by 50% to help the friend?; 11. Is it necessary for the accounting professional to keep confidential all information related to the operational activities of a company?; 12. Analyze the following problem: Knowing that a colleague of profession is having unethical attitudes, would the right thing be to only alert him to the consequences of his / her actions?; 13. Consider the following problem: Would the superior or employer be able to ask the accounting professional to commit acts contrary to the law, and if he / she did not, could he / she be fired?; 14. Consider the following problem: Should professionals who commit infractions for their own or for others’ benefits be punished by the CRCRS / CFC (Regional Accounting Council of Rio Grande do Sul / Federal Accounting Council)?; 15. Does the content of the Professional Accounting Ethics Code provide sufficient, clear and accurate information regarding the ethical conduct of this professional?; 16. Is the professional’s code of ethics important in ethical professional conduct? ** Correspond to the category “other” in the questionnaire, in which the respondent describes their ethnicity.
The answers on nominal scales were analyzed by means of descriptive statistics to determine the socio-professional characteristics of students of Accounting Sciences (questions 1 to 7). The significant correlations, especially between the socio-professional issues and the students’ knowledge about the professional ethics, were determined through the Spearman correlation, used because the characteristics of the data are non-parametric and nominal (BISQUERRA, SARRIERA and MARTÍNEZ, 2004). The Spearman correlation is classified as: low (between 0.20 to 0.39); Moderate (between 0.40 to 0.59); and strong (above 0.59) (MITRA and LANKFORD, 1999).

The ethical attitudes of the students were analyzed in accordance to the establishment of the hypotheses referring to: a) to the gender; b) age; c) to religiousness; d) professional experience; e) the number of courses taken; f) ethnicity; and g) to the course Ethics and Professional Legislation. Each hypothesis was identified as it follows: H0: The null hypothesis is accepted; And H1: The null hypothesis is rejected. Validation of H0 or H1 was performed using the Kruskal-Wallis and post-hoc Dunn-Bonferroni tests. The use of these tests is justified because the data are nominal and not parametric. Thus, they are indicated for comparisons of n independent samples.

The nominal data do not require the application of the homogeneity test of the variances, since, as the answers are in pre-defined nominal scales, the variances do not have outliers, only maximum and minimum values. Nevertheless, this test was performed, since some variables are dichotomous (1 and 2) and others are determined by the Likert scale (1, 2, 3, 4 and 5). In this sense, the Kolmogorov Smirnov and Shapiro-Wilk homogeneity tests were chosen. The statistical analyzes described were processed in the Statistical Package for Social Sciences (SPSS), used in several areas of knowledge (OLIVEIRA, 2007).

RESULTS AND ANALYSIS

Description of the socioprofessional profile and ethical attitudes

The students of the accounting sciences course surveyed at a HEI in Rio Grande do Sul are mostly female (73.2%), a trend that corroborates the 61.7% of Purnamasari (2011), the 67% of Schmidt, Ott, Santos et al. (2012) and the 57.6% of Oliveira, Jesus, Silva et al. (2014). This can be explained by the insertion of women in the labor market, encouraged by the Women Accountant project, by the CFC, by the flexibility of the profession and by the feminine values, such as emotion and sensitivity, required in the training of executives, which corroborates Antonovz, Espejo, Steiner Neto et al. (2010) and Mota e Souza (2014) (Graphic 1).

Age up to 25 years covers 72.7% of students, above the Brazilian average, which, in 2014, was 58.5% (IBGE, 2015). Increasingly early access to higher education can be explained in terms of public educational policies (ProUni, Reuni, Fies, Enem), the democratization of higher education, socioeconomic conditions (family income), marketing indicated by Carmo, Chagas, Figueiredo-Filho et al. (2014).

Students who practice some type of religion total 72.7% and, in addition, those of ethnic German and Italian represent 56% and 29.7%, respectively, and 85.7% of the total ethnicities mentioned. This high rate of ethnic German and Italian is explained by European immigration that settled in this region in the eighteenth century (RÜCKERT, 2014). Regarding the performance, 68.8% of students declare that they already work in the accounting or financial area, a result higher than the 57.3% of Moraes, Silva and Carvalho (2010) and Diehl, Freitas and Macagnan (2011).

The HEI in question is part of a region made up of 36 municipalities and its economy is highlighted in the industry, commerce, services and agriculture. It also has a hydro-rail network, placing the region in a strategic position favorable to socioeconomic development (RGSTUR, 2015). Such characteristics may suggest greater employability of professionals who act directly or indirectly in accounting or financial functions.

The Ethics and Professional Legislation course is being or was carried out by 60% of the respondents. This can be due to the fact that this course is in the 5th semester of the curricular matrix of the course of accounting sciences.
Among the students of the accounting sciences course studied, 82.2% agreed that the Ethics and Professional Legislation contributes to professional training (question 8 of Chart 2), a finding that is lower than the 92% of the study by Oliveira, Jesus, Silva et al. (2014) and Lima, Prazeres, Araújo et al. (2014). The analysis of the students’ replies on the retention of documents as guarantee of payment by the accountant (question 9) and the improper alteration in accounting invoice (question 10) revealed that, in the majority, respectively, 71.6 and 93.0% disagree (Partially / fully).

Students understand that keeping the information confidential is an obligation of the accounting professional (Question 11), 96.9% answered that they agree (partially / fully). In question 12, only 32.5% would alert the professional colleague with unethical attitudes about its consequences, and the one indicated would be the complaint to the ethics council based on CEPC guidelines.
Question 13 shows that 82.6% of the students disagree partially /fully with the dismissal of the accounting professional who performs acts contrary to the legislation. The students’ responses to the punishment of professionals who commit violations by the CRC / CFC (question 14) regarding the CEPC’s clarity and informational content regarding ethical conduct (question 15) and the importance of CEPC in the conduct of the professional (question 16) show that 96.9%, 87.9% and 97.8% of students agree (partially /fully).

The answers of the study participants show that the majority of students in the accounting sciences course of this HEI are aware of the expected attitudes of accounting professionals with ethical and moral commitment compared to the literature. However, some responses indicate weaknesses: 28.4% of the respondents agreed to withholding client documents, and 32.5% of the students would only alert the colleague who was committing unethical acts. It can be inferred that both situations do not necessarily denote non-ethical conduct, but, rather, lack of technical knowledge related to these aspects. Nevertheless, it is necessary to consider that 40% of the respondents did not attend the Ethics and Professional Legislation course until the moment of the research and 31.2% never worked in the accounting or financial area, that is, these students may have little or no knowledge about the present discussion.

Considering the descriptive analysis, students over the age of 20 present the expected behavior regarding the retention of documents by the accountant as guarantee of payment of debtors. The Ethics and Professional Legislation course is taught in the 5th semester of the accounting sciences course of the HEI in question, whereas students under 20 years old tend not to have yet to take it. Likewise, at this age, they are probably not yet working professionally in career-related roles. Studying the Ethics and Professional Legislation course and to act in the area are means that can propitiate the understanding of the ethical, legal and professional aspects of the accountant, as well as the knowledge of the responsibilities of the regulatory bodies of the professional practice. The result of the multivariate analysis confirms the hypothesis that the students who attended or who study this course answer the questions in a perspective of greater understanding about ethics.

It was also noticed that the fact that the subjects tended to warn the colleague who was committing unethical acts, instead of denouncing the CRC / CFC could reflect an attitude of fidelity and not properly unethical behavior, since at the same time, 96.9% consider that professionals who commit infractions for personal gain or for third parties should be punished by CRC / CFC. Often, co-workers are part of a reference group with which, according to Puente-Palacios and Albuquerque (2014), the individual feels motivated to maintain relationships. The reference group plays a normative role and a very strong power in the behavior of the individual, even if it is subject to institutional norms.

**SPEARMAN TEST**

The correlations analyzed are restricted to the socioprofessional profile variables (questions 1 to 7) in relation to the knowledge about professional ethics of the accounting sciences student (questions 8 to 16). The relationship with higher p-value reveals a low degree of correlation (0.368) (Table 2). In this sense, we analyzed the correlations at the significance level of 0.01 and that present a degree above 0.200. The results show that the fact that the students have studied or are studying the Ethics and Professional Legislation course can explain why: a) they disagree about the retention of the accounting books by the accountant as a guarantee because the client is in default (0.368); b) disagree about improperly altering billing in financial statements (0.290); and c) agree that the code of professional accounting ethics is sufficiently clear and precise to guide accountants (-0.217).
### Table 2

Spearman Correlation

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<td>-0.040</td>
<td>-0.0049</td>
<td>-0.129**</td>
<td>-0.028</td>
<td>-0.020</td>
<td>0.046</td>
<td>0.090</td>
<td>-0.104*</td>
<td>0.154**</td>
<td>0.150**</td>
<td>0.038</td>
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<td>Question 13</td>
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<td>-0.020</td>
<td>-0.096*</td>
<td>0.108*</td>
<td>-0.057</td>
<td>-0.077</td>
<td>0.126**</td>
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<td>0.245**</td>
<td>0.145**</td>
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<td>0.196**</td>
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<td>0.063</td>
<td>0.015</td>
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<td>0.042</td>
<td>-0.126**</td>
<td>0.147**</td>
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<td>-0.025</td>
<td>0.122**</td>
<td>-0.016</td>
<td>-0.217**</td>
<td>0.267**</td>
<td>-0.183**</td>
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<td>-0.020</td>
<td>-0.100*</td>
<td>-0.164**</td>
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<td>0.115*</td>
<td>0.034</td>
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</table>

Source: Elaborated by the authors.

Key: * the correlation is significant at the 0.05 level (2 extremities). ** The correlation is significant at the 0.01 level (2 extremities).
The number of courses already studied by students explains: a) the disagreement in the retention of the accounting books by the accountant as guarantee of payment (value p = -0.258); and b) disagreement in improperly altering billing in financial statements (p value = -0.242). These results are also consistent with the study by Lopes, Ribeiro Filho, Vasconcelos et al. (2006), when they affirm that the degree of academic maturity positively affects the discordance of acts that are not consistent with the accounting reality. It should be noted that there was no median or strong correlation. In this way, it can be affirmed that the variables, courses studied and whether or not already studied or are studying the Ethics and Professional Legislation course have a low but significant influence on the ethical attitudes of accounting students.

Table 3

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>Question 8</th>
<th>Question 9</th>
<th>Question 10</th>
<th>Question 11</th>
<th>Question 12</th>
<th>Question 13</th>
<th>Question 14</th>
<th>Question 15</th>
<th>Question 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The ethical attitude between male and female</td>
<td>0.370</td>
<td>0.131</td>
<td>0.027</td>
<td>0.187</td>
<td>0.394</td>
<td>0.859</td>
<td>0.359</td>
<td>0.652</td>
<td>0.079</td>
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<tr>
<td>b) The ethical attitude towards age</td>
<td>0.225</td>
<td>0.016</td>
<td>0.002</td>
<td>0.516</td>
<td>0.439</td>
<td>0.951</td>
<td>0.479</td>
<td>0.419</td>
<td>0.066</td>
</tr>
<tr>
<td>c) The ethical attitude towards religiosity</td>
<td>0.923</td>
<td>0.178</td>
<td>0.374</td>
<td>0.612</td>
<td>0.006</td>
<td>0.041</td>
<td>0.748</td>
<td>0.589</td>
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<td>d) Experience with the ethical attitude</td>
<td>0.415</td>
<td>0.006</td>
<td>0.000</td>
<td>0.151</td>
<td>0.553</td>
<td>0.022</td>
<td>0.008</td>
<td>0.596</td>
<td>0.600</td>
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<tr>
<td>e) Number of disciplines versus ethical attitude</td>
<td>0.650</td>
<td>0.000</td>
<td>0.008</td>
<td>0.638</td>
<td>0.125</td>
<td>0.772</td>
<td>0.167</td>
<td>0.694</td>
<td>0.771</td>
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<td>f) Ethnicity in relation to the ethical attitude</td>
<td>0.219</td>
<td>0.020</td>
<td>0.026</td>
<td>0.000</td>
<td>0.169</td>
<td>0.000</td>
<td>0.050</td>
<td>0.985</td>
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<tr>
<td>g) Has studied Ethics and Professional Legislation versus ethical attitude</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.164</td>
<td>0.055</td>
<td>0.007</td>
<td>0.007</td>
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<td>0.007</td>
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</tbody>
</table>

Source: Elaborated by the authors.

MULTIVARIATE ANALYSIS

The Kolmogorov Smirnov and Shapiro-Wilk homogeneity tests applied in the results of questions 1 to 16 show a value p = 0.000. Thus, as the value p <0.05, it can be affirmed that the consistency between the data is low, therefore, an asymmetric distribution is admitted. Because of this result, it is not recommended to apply the Student t test, but the Kruskal-Wallis test.

The use of Kruskal-Wallis test in the comparison of the average relative to the ethical attitude hypothesis among males revealed that one of the questions presents a p value <0.05 (Table 3). This result means that the null hypothesis is rejected, and the answers in question 10 have a significant difference between male and female students. With the help of the post-hoc Dunn-Bonferroni test, it was possible to notice and identify that the students disagree more about the change in billing in the financial statements to help the friend. In the studies of Lopes, Ribeiro Filho, Vasconcelos et al. (2006), Antonovz, Espejo and Steiner Neto et al. (2010) and Moraes, Silva and Carvalho (2010), the female gender was also more ethically inclined, however, Purnamasari (2011) did not find significant gender differences in relation to ethics.

Although gender is the most researched variable in relation to ethics (CRAFT, 2013), the literature does not show a consensus about the fact that women and men have different ethical values, since empirical research that tests gender differences has led to inconsistent results, contradictory or inconclusive (NEIDERMEYER, TUTEN and NEIDERMEYER, 2003; ROXAS and STONEBACK, 2004). Nevertheless, O’Fallon and Butterfield (2005) found that women make the most ethical decisions when there is significant evidence of gender differences, which is in line with the outcome of this study.

A plausible explanation is that, in the face of moral dilemmas of this nature, it is possible for women to adopt a more consistent posture with established ethical standards in order to preserve their reputation and professional prestige. In the last
decades, women have been occupying social, professional, cultural and political spaces that traditionally were reserved only for men, but there are still asymmetries in the professional context regarding the differences between men’s and women’s opportunities and salaries in similar positions (CAMBOTA and BRIDGES, 2007).

The hypothesis about the age of the students presented, in questions 9 and 10, a value p <0.05, therefore, the null hypothesis is rejected, indicating that there are significant differences. The Dunn-Bonferroni test points out that students > 20 years of age disagreed more with the retention of documents by the accountant and the improper alteration of the billing. This result can be based on the discussion about academic maturity (Spearman test) and, furthermore, Moraes, Silva and Carvalho (2010) also point out an influence of the variable age in relation to ethical attitudes.

The hypothesis regarding the religiosity of the students reveals that there is a significant difference in the answers of questions 12 and 13 (p value <0.05), thus rejecting the null hypothesis according to the Kruskal-Wallis test (Table 3). The Dunn-Bonferroni test reveals that students who do not practice a religion disagree more with unethical acts toward practitioners, a result similar to that of Keller, Smith and Smith (2007). The professional who recognizes himself as a practitioner of a religion can comply with the code because it contains the same principles that guide his religious life and indicate disapproval of unethical actions, according to Alves, Lisboa, Weffort et al. (2007).

This result can be explained by the zeal of the subjects in relation to religious beliefs, since they can be more predictive than the other specific beliefs. Moreover, religiosity functions as a mechanism that affects ethical attitude and sensitivity, as the individual internalizes his religious self-identity (Emerson and McKinney, 2010). Therefore, subjects with religious identity tend to suffer emotional discomforts if they transgress the ethical teachings of their religion, being more likely to adhere to ethical standards.

In Table 3, the hypothesis concerning professional experience shows a significant difference of means in questions 9, 10, 13 and 14 (p value <0.05). In this sense, the null hypothesis is rejected. With the aid of the Dunn-Bonferroni test, it is evident that students who work in the accounting / financial areas have greater ethical commitment, regarding: a) the retention of documents as a guarantee of fees; b) improper change in accounting billing; c) persuasion to acts contrary to legislation; d) the imposition of penalties on professionals who commit infractions. Therefore, these results are consistent with the study by Keller, Smith and Smith (2007), pointing out that there are differences in ethical attitudes when compared to professional experience.

The hypothesis regarding the number of subjects studied by the students revealed a significant difference in questions 9 and 10 (p value <0.05). The null hypothesis is rejected by the Kruskal-Wallis test. The Dunn-Bonferroni test points out that students with a greater number of courses studied have better ethical attitudes. This result is also pointed out and discussed in the “Spearman Test” section, thus strengthening the consistency of the results obtained.

The hypothesis about the ethnicity of the students analyzed by the Kruskal-Wallis test reveals that the answers of questions 9, 10, 11, 13 and 14 (p value <0.05) presented significant differences. Hence, the null hypothesis is rejected. The Dunn-Bonferroni test shows that students of German, Spanish, Portuguese and Polish ethnicity had better ethical attitudes. In this sense, it is verified that there are differences, which is also solidified by Ho (2010), when he affirms that the differences in the ethical perception of each ethnic group exist when a culture attributes moral meaning to something that another culture does not possess. It can be seen that ethical attitudes can also be linked to a higher or lower level of corruption in a country, since subjects can equate local legal and ethical standards with the ethical conduct guide, and use it for business decision-making (ROXAS et al., 2004; PETERSON, ALBAUM, MERIKKA et al., 2010). In this respect, it can be considered that students of ethnicities who presented different ethical attitudes, hold similar perspectives that influence their ethical decision-making processes.

The hypothesis regarding students who study or studied the Ethics and Professional Laws course, according to the results of the Kruskal-Wallis test, revealed that questions 8, 9, 10, 13, 14, 15 and 16 (p value <0.05) presented significant differences regarding the students’ responses, and the null hypothesis is rejected. With the Dunn-Bonferroni test, it was identified that the students who studied or studied the course Ethics and Professional Legislation present more ethical attitudes, which is in line with the study of Borges and Medeiros (2007), that indicates the importance of ethical training for the future accounting professional. Similarly, Cagle and Baucus (2006) identified that the ethical values of undergraduate and graduate students were strengthened by classroom experience. Therefore, teaching ethics can influence students’ attitudes.
CONCLUSION

The results of the socio-professional analysis indicate that the majority of students are female, up to 25 years old and practicing a religion; The central ethnic groups are German and Italian, and their professional activity is linked to the accounting/financial area. The course Ethics and Professional Legislation has been or is being studied by 60% of the research subjects and students agree that this discipline contributes to professional training. Students approve the confidentiality of the information, but disagree with the retention of documents, the billing change by the accountant, the dismissal by the employer of an employee who acts against the law.

Most also agree with the punishment of CEPC offenders and with regard to the clarity, content and importance of a code of ethics for accountants. All of these results had a percentage above 72%, that is, a level higher than 60% of students who study or studied Ethics and Professional Law. This means that ethical education has had an essential impact on the conduct and perception of the ethics of future professionals.

In applying the Spearman test, the consistency of ethical education also appears in the significant correlations, that is, the fact of attending or have attended the course and academic maturity may explain the disagreement regarding the retention of books by the accountant, the improper alteration of the invoicing and the agreement that CEPC is sufficient, clear and precise as a guide to professional conduct.

The Kruskal-Wallis test and post-hoc Dunn-Bonferroni point out that all the hypotheses tested related to gender, age, religiousness, professional experience, number of courses studied, ethnicity and whether the student attended or is attending Ethics and Professional Legislation, presented significant differences between the averages. In addition, it was identified that the academics with greater ethical attitude relate to the female gender, with more than 20 years old, do not practice religion, act in the financial/accounting area, have academic maturity, and attended or is attending the course in focus.

Therefore, it is concluded that the individual factors, analyzed in this study, and education significantly influence ethical attitudes. It is evident that it is important for the academy to be attentive to the curricular composition, contemplating courses of this nature, and to prepare its faculty to approach and debate this subject in the classroom during the professional training process. It is worth mentioning that the results of this research apply only to the HEI under analysis, since the findings do not corroborate the literature. In this sense, students from different regions, states or countries can be influenced by other intervening variables or even by cognitive differences.

The results of this research lead to new inquiries. It is relevant to replicate this study in other locations to compare the findings or extend the analysis unit to the state or country level. In addition, studies with a qualitative approach may help to clarify why intervening variables influence ethical attitudes.
REFERENCES


ALLEN, K. What is an ethical dilemma? Teaching social workers how to recognize a true dilemma. The New Social Worker, v. 19, n. 2, p. 4-6, 2012.


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