FACTORS OF ANTICIPATORY SOCIALIZATION: A STUDY WITH STUDENTS OF ACCOUNTING SCIENCES

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ABSTRACT
Motivation, environmental perception, involvement and professional commitment are characterized as sociable elements of an individual. In this context, this study investigates the factors of anticipatory socialization of university students of accounting from two federal universities in the state of Paraná under the conceptual and methodological support of the Astin model. The data were collected through a questionnaire adapted from the study of Ahmad, Anantharaman and Ismail (2012), applied to 71 graduating students in the year 2016, and were treated with the statistical techniques of descriptive analysis and Structural Equation Modeling.

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via Partial Least Square (PLS). The research findings suggest that the motivation and environmental perception factors do not affect in a statistically significant way on the involvement and, consequently, the professional commitment. However, it was confirmed that the motivation positively and significantly affects the professional commitment. Thus, these results instigate future research to include other cognitive characteristics of students that may influence them in the face of professional commitment.

**Keywords:** Motivation. Perception of Environment. Involvement. Professional Commitment.

1 INTRODUCTION

The integrity of the accounting profession and the credibility of the financial information provided by companies have been damaged by scandals, which derive largely from ethically questionable accounting and accounting practitioners (Low, Davey & Hooper, 2008). For Everett and Tremblay (2014), the dissemination of these corporate scandals instigates believing that the accountants have lost sight of their moral orientation, compromising the prestige of the profession.

The result of the work of accounting professionals is extremely important for various types of users, such as shareholders, creditors, employees, suppliers, government, besides the profession and society in general; and therefore they must pay attention to their professional responsibility (Mahdavikhou & Khotanlou, 2012). For Borges and Medeiros (2007), accounting professionals must possess elements capable of placing them in a differentiated position in relation to their peers, through their technical capacity, ethical posture and professional and social commitment.

The professional's commitment, in general, is a crucial element in the organizational context, whose success in achieving the goals depends largely on the strategies created by the organization to involve the worker, ensuring the sharing of Values, objectives and policies that guarantee equitable exchanges between the parties (Bastos & Andrade, 2002). In view of this, the professional commitment of the accountant becomes essential to be studied, since it is not known how the individual is in fact committed to the duties of the profession and what the factors that influence their attitudes are.

Research on commitment, despite being widely investigated in the organizational field (Borges & Medeiros, 2007), still needs further studies in other contexts. Investigating, understanding and understanding the roots of professional commitment are of great importance, especially to identify factors that may require intervention during the process of forming a professional. Barros (2011) argues that the school is one of the most important agents of the anticipatory socialization of individuals. It plays a decisive role in promoting attitudes and behaviors, which are fundamental to a future adaptation in the professional world. Following this line, for Ahmad et al. (2012), the existence of professional commitment results from specific socialization. It happens at the level of undergraduate education or an anticipatory phase. Thus, according to the authors, before the individual enters the labor market, the acquisition of values, attitudes are molded and cognitive abilities are developed.

In higher education institutions (HEI), little attention is given to the acquisition of values, behaviors and attitudes, necessary for the student to assume his/her professional role (Shinyashiki, Mendes, Trevizan, & Day, 2006). The professional socialization begins in the academic context. It extends further to the work environment. On this, Baccaro (2007) points out that the development of the students should be the focus of the HEI, considering the internalization of the norms and values of the profession, because, when they get into the labor market, the way they were socialized will be a differential.

Given this context, it is the purpose of this study to contribute to the improvement of the formation of the professional commitment understanding that occurs in the phase of anticipatory socialization, developed in the course of undergraduate for bachelor in Accounting. Therefore, the guiding question of this investigation is: what factors, during the undergraduate course in accounting, influence the construction of the professional commitment of students with the accounting profession?
In this perspective, this research follows the same line of the study by Ahmad et al. (2012), which adapted the model of the entry-environment-output (EAR) of Astin (1993), originally developed with the purpose of identifying factors of significant influence of the professional commitment. It seeks to contribute, with this study, in a relevant way to the formation of a more robust literature base on the experiences experienced by students in the undergraduate period that tend to influence the formation of professional commitment, since in Brazil researches this theme, focusing on the area of teaching and professional practice, are still incipient. Another important factor is the contribution to the HEI, since it can provide evaluation subsidies for items that can be considered as more important in the academic training process. The research points out the factors that contribute most to the formation of the students of accounting professional commitment.

2 THEORETICAL FRAMEWORK AND RESEARCH HYPOTHESIS

This topic will be addressed studies on the professional commitment in Accounting, the definition and anticipatory socialization concepts of Accounting students as well as the Astin theory and research hypotheses.

2.1 Professional commitment to Accounting

The professional commitment, according to Setyadi (2008), relates the nature of the individual to his profession, and includes belief, acceptance of goals and professional values. In this topic, in the accounting area, the professional commitment is significant for the professionals, as it leads to a greater sensitivity to ethical issues and increases the involvement of the work. It determines not only the professional's fidelity to the practice of the profession, but also the adherence to professional codes of conduct (Ahmad et al., 2012). The importance of these factors is also emphasized by Mahdavikhou and Khotanlou (2012), who affirm that the existence of norms and rules by them does not guarantee true information. Professionals without responsibilities and moral values can provide manipulated financial reports.

The question of the professional's commitment to the accounting profession has been considerably addressed in recent years, due to the crises of trust caused by many ethical failures (Elias, 2007). The integrity of the accounting profession and the credibility of the financial information provided by companies have been damaged by scandals, which derive largely from ethical questionable accounting and practitioners (Low, Davey & Hooper, 2008). For Everett and Tremblay (2014), the dissemination of these corporate scandals instigates to believe that the professionals have lost sight of their moral orientation.

In this perspective, the lack of morality in accounting practices is a factor that can bring invaluable consequences, since accounting works with the company's assets. The result of the work of accounting professionals is extremely important for various types of users, such as shareholders, creditors, employees, suppliers, government, besides the profession and society in general; and therefore they must pay attention to their professional responsibility (Mahdavikhou & Khotanlou, 2012). Thus, these professionals must possess elements capable of placing them in a differentiated position in relation to their peers. They must use their technical capacity, their ethical posture and their professional and social commitment (Borges & Medeiros, 2007).

The importance of the ethical behavior and the personal integrity of an individual, for the profession and for the nation, should be emphasized in the education of the academics and also of the accounting professionals that were already trained (Smith, 2003). For Mastracchio (2005), education in accounting must teach methods to measure the consequences of decisions taken by accountants. In the same direction, Elias (2007) points out that education for professional commitment in accounting should begin in the classroom, emphasizing the importance of financial reports for users, as well as their own profession. Thus, it is observed that these and other behaviors should be directed towards a greater professional commitment to the area and emphasized in all stages of a professional, especially in the socialization with the profession.
2.2 Anticipatory socialization of accounting students

Professional socialization can be understood as the process through which the student acquires a feeling of professional identity and develops knowledge, skills and commitment to the profession (Waugaman & Lohrer, 2000). This process of socialization occurs according to events, professional reunions, or needs and desires of individuals. The values of the groups with which it relates can be included in this context. In this way, Dubar (2005) argues that socialization is not only the transmission of values, rules and norms, but also causes the individual to develop a representation of a particular environment or area of specialization.

The process of professional socialization is developed in three phases, according to Ards, Janse and Van Der Velde (2001): (i) the anticipatory phase, which occurs during higher education; (ii) phase of the first referral for the exercise of professional activities and (iii) phase of the acquisition of experience after several years of professional work. Regarding the first phase, the anticipatory socialization, Pitney (2002) defines it as the process or stage by which individuals learn how to internalize unique professional traits for the chosen profession. In the accounting profession, the focus of this study, the socialization process occurs in the anticipatory phase. It is a continuous process, which occurs during the period of the higher course in accounting course.

The formation of undergraduates is a complex process. It is when individuals pass the level of students to professionals. In this way, Baccaro and Shinyashiki (2011) say that they are prepared on an advanced educational level to take responsibility for the practice of a career characterized by a high level of autonomy, within the scope of a specialty particular intellectual property. The expectations about professional practice lead to normative education, with values, ethics, personal and professional commitment. Lean individuals to a service orientation and development of knowledge and skills (Weidman, Twale & Stein, 2001).

The anticipatory socialization, even with origin during the higher course, extends to the entire professional life of the individual. Therefore, the HEI should focus on the development of its students and consider the internalization of the norms and values of the career, because when they enter the labor market, the way they were socialized will be a differential (Baccaro, 2007). Following this line, for Ahmad et al. (2012), the HEI should ensure that the teaching environment is conducive to learning activities and student involvement, encouraging and starting it correctly in the professional career.

In the Brazilian accounting context, research under anticipatory socialization is incipient. However, in the international context, several studies indicate positive effects on the anticipatory socialization of accounting students in various subjects, such as the environment, ethics and characteristics of the students (Elias, 2006, 2007, 2008; Saat, Porter & Woodbine, 2012; Farag, 2016). Ahmad et al. (2012) argued that higher levels of anticipatory socialization (understood in motivation, perception of the environment and involvement of accounting students) resulted in higher levels of professional commitment.

2.3 Astin Model

This study investigates which factors, in the undergraduate course in accounting, influence the construction of the professional commitment. It is based on the theory of student involvement and the Astin model, structured based on three fundamental elements: (i) entry, (ii) environment and (iii) leave from higher education students.

The experiences experienced by students in the undergraduate period are explained by the impact models of the university. For Pascalella and Terenzini (2005), these models attribute the cognitive and affective changes that occur in the student during their academic training to factors such as the characteristics of the institutional environment, characteristics and experiences of the student and the relationship between teacher and student. For Murray (2006), these models explain not only the way students benefit from their training, but also how the HEI is prepared to provide these benefits. According to the author, the most cited model in this area is Astin's EAR (1993).

Astin's Studies (1993) contribute to the development of the area of higher education. They emphasize the understanding of how the changes and the development of the students
occur during the training process and what can be done to increase this development (Schleich, 2006). The EAR model, according Ahmad et al. (2012), is applicable in almost any field of the social sciences and has been used in several studies. This model is premised that educational assessments are not complete, unless they include information about the inputs, the educational environment and the results of the students (Astin, 1993).

The factors that compose the model are the fundamental concepts of the theoretical model of Astin's student Involvement (1984), which describes the importance of students ' involvement in the university. The (i) entries are the demographic data, the training and any previous experiences of the student; (ii) The environment is responsible for all the experiences experienced by the student during the course and (iii) the results cover characteristics, knowledge, attitudes, beliefs and values that remain after the student forms.

In this direction, the Astin model is considered appropriate to explain the professional commitment, since it integrates important elements within the teaching of accounting. The entries refer to the characteristics with which the students enter the undergraduate course in accounting sciences, and directly influence the environment and the results. The environment is related to the students ' experiences during the course. The results are the knowledge, academic achievements, values and behaviors acquired during the training (Ahmad et al., 2012).

Moreover, this model evidences the need to have an understanding of the qualities of the students and the characteristics they present at their entrance to a teaching institution, the context of the educational environments with which they come into contact and the measure of the evolution of the knowledge and values acquired during the academic period. The students' input variables are the characteristics with which they begin graduation (Astin 1993), and one of them is the motivation that determines how students work in relation to their goals (Ahmad et al., 2012). For Santos (2013), the commitment to university education is dependent on the individual motivation and academic skills of the student.

In this context, to know how motivation acts on professional commitment it is necessary to identify which factors are directly associated with it and whether they are of external or internal origin to the individual. In the Astin Model (1993), motivation is directly related to the environment, which is corroborated by Murray (2006), when he affirms that motivation is a byproduct of the interaction with the environment. Therefore, in relation to the motivation construct, the following hypotheses are proposed for this research:

$H_1$: The motivation of the students has a positive relationship with the perception of the environment.

$H_2$: The students' motivation has positive relationship with the professional.

In the same way as motivation, environmental perception is a variable that indirectly affects professional commitment. For Murray (2006), since the HEI is responsible for creating an environment conducive to learning, the counterpart of students is the responsibility for the investment of time and effort, aiming at their own education. Santos (2013) points out that the student's involvement, understood in his own interaction and effort with the university's social and academic systems, occurs over time. In this same line, Schleich (2006) evidenced the importance of the student's role in exchanging ideas about the institutional environment, which represent changes that depend on the students ' involvement with the resources offered by the institution. Based on this context, the third research hypothesis is elaborated:

$H_3$: The perceived environment has a positive relationship with the student's involvement.

The construct of involvement is the central point of the Astin Model (1984). According to the author, the most involved students dedicate themselves to conducting their studies. They employ a considerable amount of time in the university context, actively participate in student tasks and interact with employees and professors from the academic institution to which they belong. Thus, the construct of student involvement in certain aspects resembles a more common construction in psychology: Motivation (Astin, 1984). Therefore, the following research hypotheses are established:

$H_4$: Student motivation has a positive relationship with the student's involvement with the profession.
H5: The student’s involvement acts as a mediating variable in the influence of motivation on professional commitment.

Given these considerations, the theoretical model integrates four relevant elements of the model of Astin’s Involvement (1993), namely: Student motivation, perception of environment, involvement and professional commitment, as shown in Figure 1.

![Theoretical model and hypotheses of the research](source)

The results are the knowledge, academic achievements, values and behaviors acquired during training (Ahmad et al., 2012).

### 3 METHODOLOGY

The population investigated in this study consists of 165 students regularly enrolled in the undergraduate courses in accounting and graduates in the year 2016, in two federal institutions of higher education in the state of Paraná. To calculate the minimum sample number, the software G*Power was used, in line with the parameters suggested by Ringle, Silva and Bido (2014), for use in structural equation modeling. The software G*Power allows the calculation of the minimum a priori sample, based on the latent variable with the highest number of predictors (Ringle et al., 2014). For this study, considering the constructs present, the minimum calculated sample was 63 respondents. The final sample consisted of 71 students.

The research instrument used to collect the data in this study was translated and adapted from Ahmad et al. (2012). The original questionnaire is composed of 69 assertives, of which five were excluded because they were not applicable to the Brazilian context. Thus, the final version consisted of 64 assertives on a seven-point Likert scale. The Back-translation process (Cooper & Schindler, 2003) was used in the preparation of the instrument applied to the potential respondent. After the translation and adaptation, a pre-test was performed with six students from a stricte-sensu postgraduate program and with four professors from a federal university, with the purpose of verifying the comprehensibility of the content and performing the possible adjustments. Table 1 summarizes the composition of the questionnaire, by constructs, variables and their respective amounts of assertives.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Variables</th>
<th>Assertive</th>
</tr>
</thead>
</table>
| Motivation (MTV)              | • External Motivation (MTVE);  
  • Internal Motivation (MTVI); | 1 to 9 Building A |
| Perception of Environment (P.A.) | • Students (PA.Alu);  
  • Building (PA.PRD);  
  • Professor (PA.Prof);  
  • University (PA.UNV) | 1 to 20 Building B |
For data collection, the research instrument was applied in person to the students by one of the authors, in April 2016, in two federal education institutions, both in the state of Paraná.

Data were initially treated with descriptive statistics. Subsequently, the Structural Equation Modeling (SEM) technique was used and processed with the software SmartPLS. SEM is a linear regression estimation technique based on the decomposition of variable matrices and covariates (Bido, Silva, Souza, & Godoy, 2010). SEM allows to test a set of variables and to investigate the level of explanation of independent variables in relation to dependent variables (multiple regression aspects), and to indicate which exogenous variable is more important (Klem, 2006). In this study, the option for the Partial least Squares (PLS) model is due to the sample size (n=71), since it is appropriate when working with small samples (Hair, Black, Babin, Anderson, & Tatham, 2009).

4 RESULTS AND DISCUSSION

This section will present, at first, the profile of respondents, descriptive analysis of data, validity and reliability of the model. Following, the conceptual model and the statistical test, and finally, the analysis and discussion of the results.

4.1 Profile of respondents

The table 2 details the characteristics of the sample, that is, the demographic profile regarding gender, age, institution and marital status of the 71 respondents.

Table 2
Profile of respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
<th>Age</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>38</td>
<td>(54%)</td>
<td>From 1970 to 1979</td>
<td>1</td>
<td>(1%)</td>
</tr>
<tr>
<td>Male</td>
<td>33</td>
<td>(46%)</td>
<td>From 1980 to 1989</td>
<td>15</td>
<td>(21%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>From 1990 to 1995</td>
<td>55</td>
<td>(77%)</td>
</tr>
<tr>
<td>Institution</td>
<td>N</td>
<td>%</td>
<td>Marital status</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>UFPR</td>
<td>45</td>
<td>(63%)</td>
<td>Married</td>
<td>14</td>
<td>(20%)</td>
</tr>
<tr>
<td>UTFPR</td>
<td>26</td>
<td>(37%)</td>
<td>Divorced</td>
<td>2</td>
<td>(3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single</td>
<td>55</td>
<td>(77%)</td>
</tr>
</tbody>
</table>

Source: source of the search (2016).

As Table 2, of 71 respondents of the survey, 54% are female gender, with a preponderance of age in the range 21 and 26 years. Of the total sample, 45 students study at the Federal University of Paraná (Universidade Federal do Paraná - UFPR), located in Curitiba, and 26 on Federal Technological University of Paraná (Universidade Tecnológica Federal do Paraná), located in Pato Branco. As for the marital status, 55 respondents declare themselves as single. Of the 71 students who were respondent and regularly enrolled as seniors of the year 2016, 18 of them are in their second higher education course. Among the courses completed include: Interior Design, Tourism, Administration, Zootechnics, Languages (Arts), Logistics, Law, Secretariat, Mathematics, Environmental Engineering and Physics. It was not investigated the reason why students are attending a second course, in specific, the undergraduate in accounting.

4.2 Structural model and hypotheses of search

The quality of the model was evaluated by means of composite reliability (CC),
Cronbach’s Alpha, convergent validity and discriminant validity. Reliability is considered appropriate when factorial loads have a Cronbach’s Alpha and a CC of at least 0.70 (Hair et al., 2009). The convergent validity, in accordance with the arguments of Hair et al. (2009), refers to the Average Variance Extracted (AVE), which demonstrates the shared variance between the indicators of each latent variable or construct of the model.

The discriminant validity analysis was performed by comparing the square root of the AVE with the correlations between the latent variables (Fornell & Larcker, 1981). This indicator is considered satisfactory when the coefficient obtained from the latent constructs, manifested in its variables, exceeds 0.50 (Fornell & Larcker, 1981).

Finalized these tests, identified the need for exclusion of some indicators: (i) external motivation (MTVE4, 5, 6 MTVE MTVE); (ii) perception of the students’ environment (PA. ALU2), University (PA. UNV4); (iii) involvement-interaction with professors (ENV.I1, ENV.I10, ENV.I13, ENV.I14), effort (ENV.P1, ENV.P6) and (iv) professional commitment (CPROF2, CPROF3, CPROF4, CPROF6, CPROF8). Table 3 details the results of AVE, CC, R² and Cronbach’s Alpha.

### Table 3
**Internal reliability of constructs and convergent validity**

<table>
<thead>
<tr>
<th>Variables</th>
<th>AVE</th>
<th>Composite Reliability</th>
<th>R²</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA.ALU</td>
<td>0.7016</td>
<td>0.9037</td>
<td>0.112</td>
<td>0.8574</td>
</tr>
<tr>
<td>PA.Prof</td>
<td>0.6649</td>
<td>0.9082</td>
<td>0.253</td>
<td>0.8744</td>
</tr>
<tr>
<td>ENV.I</td>
<td>0.5469</td>
<td>0.8252</td>
<td>0.334</td>
<td>0.7303</td>
</tr>
<tr>
<td>ENV.P</td>
<td>0.3811</td>
<td>0.8578</td>
<td>0.354</td>
<td>0.8177</td>
</tr>
<tr>
<td>MTVE</td>
<td>0.6601</td>
<td>0.8535</td>
<td>—</td>
<td>0.7536</td>
</tr>
<tr>
<td>MTVI</td>
<td>0.6685</td>
<td>0.8580</td>
<td>—</td>
<td>0.7521</td>
</tr>
<tr>
<td>PA.PDR</td>
<td>0.7752</td>
<td>0.9451</td>
<td>0.208</td>
<td>0.9274</td>
</tr>
<tr>
<td>CPROF</td>
<td>0.5645</td>
<td>0.9273</td>
<td>0.433</td>
<td>0.9112</td>
</tr>
<tr>
<td>PA.UNV</td>
<td>0.6231</td>
<td>0.8686</td>
<td>0.179</td>
<td>0.7996</td>
</tr>
</tbody>
</table>

**Note.** Students (PA.ALU); Professor (PA.Prof); Interaction with Professors (ENV.I); Own effort (ENV.P); External Motivation (MTVE); Internal motivation (MTVI); Building (PA.PDR); Commitment Professional (CPROF); University (PA.UNV). Source: source of the search (2016).

Detailed AVE coefficients in Table 3 meet the parameters indicated in the literature, except for the scale involvement of own efforts. Even after the exclusions of two indicators, identified with low factorial loads (ENV.P1, ENV.P6), we were unable to fully meet convergent validity. However, due to the fact that this dimension composes the construct component involvement of the Astin model, the option was for its permanence. Regarding the reliability of the model, the values for the composite reliability and for the Cronbach’s Alpha are greater than 0.70, the minimum recommended. Table 4 details the results of the discriminant validity.

### Table 4
**Discriminant validity**

<table>
<thead>
<tr>
<th>Variables</th>
<th>PA.ALU</th>
<th>PA.Prof</th>
<th>ENV.I</th>
<th>ENV.P</th>
<th>MTVE</th>
<th>MTVI</th>
<th>PA.PDR</th>
<th>CPROF</th>
<th>PA.UNV</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA.ALU</td>
<td>0.8376</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA.Prof</td>
<td>0.5810</td>
<td>0.8154</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV.I</td>
<td>0.4281</td>
<td>0.4961</td>
<td>0.7395</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV.P</td>
<td>0.3485</td>
<td>0.4178</td>
<td>0.4967</td>
<td>0.6173</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTVE</td>
<td>0.1773</td>
<td>0.4419</td>
<td>0.1406</td>
<td>0.4722</td>
<td>0.8125</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTVI</td>
<td>0.3235</td>
<td>0.3592</td>
<td>0.2906</td>
<td>0.3272</td>
<td>0.2910</td>
<td>0.8176</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA.PDR</td>
<td>0.5974</td>
<td>0.6367</td>
<td>0.2987</td>
<td>0.2095</td>
<td>0.2583</td>
<td>0.4342</td>
<td>0.8805</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPROF</td>
<td>0.4763</td>
<td>0.5504</td>
<td>0.4048</td>
<td>0.4181</td>
<td>0.6222</td>
<td>0.5143</td>
<td>0.5355</td>
<td>0.7513</td>
<td></td>
</tr>
<tr>
<td>PA.UNV</td>
<td>0.6518</td>
<td>0.7652</td>
<td>0.5033</td>
<td>0.3855</td>
<td>0.3115</td>
<td>0.3647</td>
<td>0.6812</td>
<td>0.4915</td>
<td>0.7894</td>
</tr>
</tbody>
</table>

Source: source of the search (2016).

In general, as indicated in the results shown in Table 4, the discriminant validity has been widely met by the square root of the coefficient of AVE (Fornell & Larcker, 1981).
Based on the model Astin (1993) and Ahmad et al. (2012), five hypotheses were mentioned, as attempts to answer the research question. The corroboration or not of these research hypotheses were made through the Bootstrapping procedure. In each structural path of the path diagram of the model, the test to corroborate or not the research hypothesis was to verify whether the values of the $t$-value are greater than 1.96 for a P-value < 0.01 and P-value < 0.05, as recommended by Hair et al. (2009). Table 5 details the analysis of the established relations between the investigated constructs.

Table 5
Panel of the relations between the investigated constructs

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Constructs</th>
<th>Structural relation</th>
<th>Beta</th>
<th>t-value</th>
<th>p-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>MTV→PA</td>
<td>MTVE→PA.ALU</td>
<td>0.0908</td>
<td>0.7685</td>
<td>0.442</td>
<td>n.s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVE→PA.Prof</td>
<td>0.3686</td>
<td>3.3526</td>
<td>0.001 *</td>
<td>sig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVE→PA.PRD</td>
<td>0.1442</td>
<td>1.091</td>
<td>0.276 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVE→PA.UNV</td>
<td>0.2244</td>
<td>1.9572</td>
<td>0.051</td>
<td>n.s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVI→PA.ALU</td>
<td>0.2971</td>
<td>2.6894</td>
<td>0.007 *</td>
<td>sig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVI→PA.Prof</td>
<td>0.2519</td>
<td>2.5117</td>
<td>0.012 **</td>
<td>sig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVI→PA.PRD</td>
<td>0.3922</td>
<td>3.7827</td>
<td>0.000 *</td>
<td>sig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVE→PA.UNV</td>
<td>0.2994</td>
<td>2.745</td>
<td>0.006 *</td>
<td>sig</td>
</tr>
<tr>
<td>H2</td>
<td>MTV→CPROF</td>
<td>MTVE→CPROF</td>
<td>0.3102</td>
<td>2.769</td>
<td>0.006 *</td>
<td>sig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVI→CPROF</td>
<td>0.3405</td>
<td>3.5858</td>
<td>0.000 *</td>
<td>sig</td>
</tr>
<tr>
<td>H3</td>
<td>PA→ENV</td>
<td>PA.ALU→ENV.P</td>
<td>0.1653</td>
<td>0.912</td>
<td>0.362 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PA.ALU→ENV.I</td>
<td>0.215</td>
<td>1.2133</td>
<td>0.225 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PA.Prof→ENV.P</td>
<td>0.3242</td>
<td>2.0192</td>
<td>0.044 **</td>
<td>sig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PA.Prof→ENV.I</td>
<td>0.1269</td>
<td>0.6732</td>
<td>0.501 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PA.PRD→ENV.P</td>
<td>-0.243</td>
<td>1.375</td>
<td>0.169 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PA.PRD→ENV.I</td>
<td>-0.277</td>
<td>1.5322</td>
<td>0.126 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PA.UNV→ENV.P</td>
<td>0.2901</td>
<td>1.58</td>
<td>0.114 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PA.UNV→ENV.I</td>
<td>0.1664</td>
<td>0.7686</td>
<td>0.442 n.s</td>
<td></td>
</tr>
<tr>
<td>H4</td>
<td>MTV→ENV</td>
<td>MTVE→ENV.P</td>
<td>-0.103</td>
<td>0.8897</td>
<td>0.374 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVE→ENV.I</td>
<td>0.3481</td>
<td>2.3637</td>
<td>0.018 **</td>
<td>sig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVI→ENV.I</td>
<td>0.1703</td>
<td>1.0809</td>
<td>0.280 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVI→ENV.P</td>
<td>0.1503</td>
<td>1.2266</td>
<td>0.220 n.s</td>
<td></td>
</tr>
</tbody>
</table>

**PANEL B: with mediation**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Constructs</th>
<th>Structural relation</th>
<th>Ef. Direct</th>
<th>Ef. Indirect</th>
<th>Ef. Total</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5</td>
<td>MTV→ENV→CPROF</td>
<td>MTVE→ENV.I→CPROF</td>
<td>0.3102</td>
<td>0.0138</td>
<td>0.3240 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVE→ENV.P→CPROF</td>
<td>0.3102</td>
<td>-0.0250</td>
<td>0.2852 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVI→ENV.I→CPROF</td>
<td>0.3405</td>
<td>0.0068</td>
<td>0.3473 n.s</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MTVI→ENV.P→CPROF</td>
<td>0.3405</td>
<td>0.0364</td>
<td>0.3769 n.s</td>
<td></td>
</tr>
</tbody>
</table>

Nota. n.s.: not significant and, sig.: significant.
Source: source of the search (2016).

The data of the tests detailed in Table 5 show the relationships between the dimensions of all constructs, individualized for better visualization. The results of the analysis of the research hypothesis test are in accordance with the procedures used in the study by Ahmad et al. (2012).

The H1 advocates that students' motivation is positively associated with the perception of the environment. Unlike the finding by Ahmad et al. (2012), was not corroborated. The motivation construct is composed of the dimensions (i) external motivation and (ii) internal motivation. However, in the validation analysis of the structural model, three indicators were excluded because they did not meet the recommended values (discriminant and convergent). The obtained final relations, only the relation of MTVE→PA.ALU; MTVE→PA.PRD, and MTVE.-→PA.UNV were not statistically significant. Therefore, the results show that the size is the strongest internal motivation, suggesting that respondents have locus of internal control.
The H2 describes that the motivation of students is positively associated with the professional commitment, which was corroborated, a 99% confidence level, for the dimensions (MTVE \( \rightarrow \) CPROF with \( \beta = 0.3102, t = 2.769, p < 0.01 \) and, MTVI \( \rightarrow \) CPROF with \( \beta = 0.3405, t = 3.5858, p < 0.01 \)), bonded with the findings of the study of Ahmad et al. (2012). This finding suggests that respondents demonstrate professional commitment through internal and external motivational factors.

The H3, which describes that the perceived environment has a positive relationship with the student's involvement, was not corroborated, diverging from the findings of Ahmad et al. (2012). The only exception, positively significant, is the relationship between the dimensions PA.Prof \( \rightarrow \) ENV.P (\( \beta = 0.3242, t = 2.0192, p < 0.05 \)). This result shows that the professors of the institutional environment affect the students' own effort. Therefore, it suggests that professors exert a great influence on their own commitment to training and, consequently, to the profession chosen by the student.

The H4, of which the student's motivation is positively associated with their involvement with the course of accounting and the accounting profession, was not confirmed. Internal motivation is not characterized as a dimension that affects students' involvement with professors and their personal effort. Another detail is that external motivation does not affect students' involvement with their own effort, that is, that external influences and opinions do not significantly impact the student's greater effort.

Finally, H5 sought to test whether the student's involvement acts as a mediating variable in the influence of motivation on professional commitment, and, unlike the finding of the study by Ahmad et al. (2012), was not corroborated. This result suggests that the motivation, in the external and internal dimensions, does not affect the professional commitment, through the involvement of personal commitment and also through the involvement with professors.

Therefore, the findings of this investigation, carried out in a teaching environment of two federal institutions of higher education in the state of Paraná, diverge, in part, from the study by Ahmad et al. (2012). In summary, the results suggest that perceptions of motivation and environment impact not statistically significant involvement, but the motivation affects positively and significantly the professional commitment. It reveals that a student motivated to the profession will be a good professional.

5 CONCLUSIONS

This study investigated the anticipatory socialization factors of college students of Accounting in two federal universities located in the state of Paraná, based on the study of Astin. For data collection, we used a questionnaire adapted from the study of Ahmad et al. (2012), applied to 71 senior students of graduation in 2016. Statistical techniques of descriptive analysis and structural equation modeling via PLS were used for data treatment.

The research results referring to the descriptive analysis indicate that the sample consisted of 54% of women, with respondents of age group predominantly between 21 and 26 years. To analyze the hypotheses, the structural equation modeling was used. According to the results obtained, it is inferred that the internal motivation dimension is the strongest, when compared with motivation originated by external factors. It evidences that the questioned students have a preponderant internal locus of control. Thus, it is inferred that the construct motivation in a complete way only affects in a statistically significant way the variable professional commitment.

The research aimed to investigate the factors that during the course of accounting course influence the construction of the professional commitment of students with the accounting profession. In the analysis of the results, the motivation variable, composed of internal and external factors, positively influences the professional commitment of accounting students to the accounting profession. Moreover, in the analysis of the motivation variable, the internal dimension was strongly related to the perception of the environment. Corroborating this result, Murray (2006) states that motivation is a byproduct of interaction with the environment and, therefore, the institution has great responsibility for this improvement.

Also, regarding the perceived environment, it was found that professors exert great
influence on the student's professional commitment and, consequently, in their professional training. According to this result, Krug and Krug (2008) advocate that the professor can influence the students, either as people or as professionals, that is, the more present are the teachers in the training, the better the commitment and the perception of the environment the student has.

An interesting finding of the analysis points out that motivation does not affect professional commitment through student involvement. For Murray (2006), since the HEI is responsible for creating an environment conducive to learning, the counterpart of students is the responsibility for the investment of time and effort, aiming at their own education. In this sense, it is worth mentioning the students, when the choice of higher education, and consequently the future profession, must support the most complete information to make sure of the decision. With that, more assertive is the decision in relation to the course and the profession and, consequently, the greater the commitment of the individual.

The research is the fact that limitation have been investigated only two HEI students, which means that the results cannot be generalized. Another limiting factor is that only students were investigated last year of Accounting in both institutions. The findings instigate studies at other institutions, including the private ones, which can bring different results, especially with regard to construct "environment", due to the specificities of those HEI in relation to your organizational structure. It is also recommended that the investigation extends to other periods of graduation, not limited to students graduating from the course, aiming to capture also the perceptions of others in relation to the constructs of the model.

REFERENCES


Fornell, C. & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. Journal of marketing research, 382-388.


