



Article The Influence of Students' Perceptions and Motivation on Accounting and Taxation Careers

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Abstract: Companies depend on the trust and confidence of the general public to thrive. The integrity of financial reporting practices plays a pivotal role in establishing and sustaining stakeholders' confidence. This trust serves as a foundational cornerstone in managerial decision-making processes and in facilitating the active participation of a diverse spectrum of stakeholders within organizational frameworks. Despite its reputation for ethical and transparent conduct, the field of accounting often grapples with a perception of mundanity, particularly among student populations. This study uses a structural equation modeling approach to assess the impact of students' perceptions of the accounting profession on their motivation in academic coursework, using a sample of 92 undergraduate students of accounting and taxation subjects. Additionally, it seeks to investigate how this motivation directly influences their perceptions of future career and how it operates indirectly through their active engagement in accounting and taxation courses. The research findings indicate that students' perceptions of the accounting profession have a direct and positive effect on the perceptions of future career of individuals enrolled in both accounting and taxation courses. This influence is further mediated by the levels of motivation and engagement observed in the academic domain. Moreover, the results highlight the direct and positive influence of students' motivation and engagement in their coursework on their perceptions of future career.

Keywords: accounting; accounting profession; accounting education; structural equation models

1. Introduction

The number of graduates in the field of accounting has been witnessing a decline, accompanied by a waning enthusiasm amongst the student body to elect accounting as their primary field of study. Simultaneously, there has been a noticeable decrease in the engagement of students in the Certified Public Accountant (CPA) examination. In tandem, the sector continues to grapple with a pervasive scarcity of accounting practitioners, a predicament attributable to a confluence of factors including, but not limited to, stringent entry prerequisites, negative perceptions surrounding the profession, inequitable remuneration structures, a lack of diversity within the field, an excessive focus on specialization, and the prohibitive costs associated with obtaining the requisite education (Burke and Polimeni 2023).

Over the years, numerous proposals have emerged in attempts to formulate a comprehensive definition of accounting. In essence, accounting can be broadly described as the systematic process encompassing the recording, categorization, and summarization of various operations and transactions, primarily of a financial nature (American Institute of Certified Public Accountants 1953). This definition has been refined to incorporate an expanded purview, now encompassing the systematic recording, categorization, and summarization of operational and financial transactions, as well as the essential procedures of identifying, measuring, and communicating economic information.



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Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). These additional elements are essential for facilitating informed judgments and decisions by the users of this information (American Accounting Association 1966) and represent a relatively unanimous definition. The International Accounting Standards Board (IASB) has partially incorporated elements of this definition into the primary underlying objective of financial reporting, i.e., "the objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions relating to providing resources to the entity" (International Accounting Standards Board 2018, p. 7).

The necessity for trust in financial reporting greatly emphasizes the importance of accounting professionals and their associated organizations. Accountants are compelled to cultivate an image characterized by confidence and respectability in the eyes of the general public. However, to draw the most accomplished and skilled individuals to the field, it is imperative to provide them with enticing challenges and rewards. This serves the dual purpose of attracting top-tier professionals and expanding the reach and influence of the profession's work. Ultimately, the overarching goal is to sustain a positive image and uphold the public's trust in the accounting profession (Carnegie and Napier 2010). Nevertheless, a series of notable accounting scandals, including but not limited to the Enron case in 2001, WorldCom's scandal in 2002, American International Group's case in 2005, and the more recent Wirecard scandal in 2020, along with the repercussions of the banking crisis, have ignited substantial critique directed at auditors (Dunne et al. 2021). These incidents endanger the requisite trust in accounting reporting and practitioners, illustrating that stakeholders such as employees and shareholders, often innocent and unaware of the fraudulent acts of company executives, are not exempt from the detrimental effects of corporate collapses (Petra and Spieler 2020).

The endeavor to cultivate a positive image of accounting and accountants within the public sphere is paramount to fostering the trust of all stakeholders involved in the corporate ecosystem and their confidence in financial reporting. Nevertheless, the accounting profession is confronted with persistent challenges, which are further exacerbated by international economic trends. The increasing global interconnection among nations and corporations, coupled with the proliferation of international regulations, has created a fertile ground for the burgeoning significance of accountants in both corporate entities and public life. However, the embrace and proliferation of globalization, along with the rapid advancements in information technology (IT) (Mohamed and Lashine 2003), the adoption of cloud computing, continuous accounting, artificial intelligence, big data in accounting and reporting (Gulin et al. 2019), and the emergence of blockchain technology capable of automating many manual tasks (Sinha 2020), have ushered in a multitude of challenges and opportunities for the accounting profession and its practitioners (Gulin et al. 2019; Sinha 2020).

Traditionally, accountants have often been stereotyped as being somewhat unanimated, superficial, passive, and detached (Richardson et al. 2014; Beard 1994; Bougen 1994). However, despite several scandals affecting the profession, particularly those highly visible to general public, it is important to note that concurrently, accountants are also recognized for their integrity and honesty, traits that instill confidence and trust in their handling of financial matters for clients and employers (Bougen 1994; Richardson et al. 2014).

Contemporary and prospective accounting professionals face an incessant array of challenges, and these challenges significantly influence the decisions made by undergraduate accounting students regarding their future career paths. While prior research has identified various factors impacting these decisions, the results have been diverse. Notably, factors such as intrinsic motivation and exposure to the accounting profession have emerged as more pertinent determinants of the career choices made by undergraduate accounting students compared to external influences or extrinsic motivations (Ng et al. 2017). In contrast, intrinsic factors and prior exposure to accounting during high school have not demonstrated a significant impact on students' decisions to pursue a career in accounting. Instead, financial considerations, job-related factors, and the perceived benefit–cost ratio have played more substantial roles in shaping their career choices (Ahmed et al. 1997).

The objective of this study is to evaluate the impact of students' perceptions of the accounting profession on their motivation, classroom engagement, and their career aspirations in accounting. To undertake this analysis, the research relies on data collected via a survey administered to undergraduate students enrolled in a Business Management program at a Portuguese higher education institution. Structural equation modeling is employed as the analytical tool to examine the interrelationships between the variables under investigation.

This study is structured into five distinct sections. The Section 2 provides an in-depth review of the relevant literature and lays the groundwork for hypothesis development. Following this, Section 3 outlines the methodology employed in the research, detailing the data collection and analysis procedures. Section 4 is dedicated to presenting the research findings, while Section 5 delves into discussions and conclusions drawn from the study's outcomes.

2. Theoretical Framework and Hypotheses Development

The Social Cognitive Career Theory, as formulated by Lent et al. (1994), encompasses various facets of individual career development and decision making. It examines vocational choices and academic pursuits, as well as the tenacity and achievement within one's chosen career path. This comprehensive framework takes into account personal, contextual, and behavioral factors that influence career development and decision making (Flores et al. 2010; Lent et al. 1994; Ng et al. 2017).

These variables can be categorized into two broad categories: intrinsic and extrinsic factors that impact individuals. For example, extrinsic elements like financial considerations, job-related factors, and the perceived benefit–cost ratio have been found to exert significant influence on students' decisions to pursue a career in accounting (Ahmed et al. 1997). Conversely, intrinsic factors and exposure to the accounting profession have been shown to be relevant factors shaping the career paths of undergraduate students (Ng et al. 2017). Both factors are commonly conceptualized as dimensions of motivation, positing that students' career choices are influenced by a dual framework of intrinsic and extrinsic motivations.

Therefore, understanding the impact of students' perceptions of the accounting profession on their motivation to engage in relevant coursework is crucial for educators and policymakers. Positive perceptions of the accounting profession can serve as a significant motivator, enhancing student engagement in coursework. Nevertheless, the process through which students gather information about the profession is complex, encompassing factors like the public image of the profession, its applicability to real-world scenarios, the perceived prospects for future success in accounting, the influence of positive role models within the field, and the congruence of the profession with their personal values and career ambitions.

Consequently, departing from the above reasoning, the following hypothesis was formulated:

Hypothesis 1 (H1). There is a positive and direct relationship between accounting and taxation students' perceptions of the accounting profession and their motivation towards coursework.

Although the binary perspective of motivation may be open to challenge (Reiss 2012), the concept is commonly accepted in its primary forms: intrinsic and extrinsic motivation (Byrne and Flood 2005; Stage and Williams 1990; Pintrich et al. 1993). According to Reiss (2012), intrinsic motivation pertains to a person's pursuit of a goal driven by their genuine desire for it, whereas extrinsic motivation involves striving for an instrumental objective in order to attain an external goal. Hence, when it comes to accounting students, their motivations can stem from their intrinsic beliefs, personal goals, or inherent interests (Byrne and Flood 2005), or from a set of considerations geared towards achieving external

objectives (Donald 1999). For example, students might choose to pursue a career in accounting because they find the field genuinely intriguing (intrinsic motivation) (Ng et al. 2017) or because they perceive that the accounting profession offers a favorable benefit–cost ratio (extrinsic motivation) (Ahmed et al. 1997). In essence, students' decisions about studying accounting are influenced by their perceptions of the profession, encompassing both financial and reputational aspects, as well as their motivation to engage with this subject matter. Consequently, the academic journey of undergraduate students is shaped by their motivation regarding the accounting discipline, and their level of engagement in the learning process is molded by an array of factors, including their personal past experiences and their perceptions of the accounting profession.

Students' engagement is typically defined as the level of effort, time, and energy they invest in various learning tasks, which encompasses activities like studying and interacting with peers and instructors regarding course content (Kuh 2009; Pace 1990). It encompasses several dimensions, including students' active involvement, dedication, and focus during classes (Newmann et al. 1992; Singh et al. 2002; Singh 2002). Additionally, it involves students' skills, participation in classroom activities, emotional connection to course materials, classmates, and instructors, and also encompasses a certain degree of academic performance (Handelsman et al. 2005).

Students' motivation and their engagement in coursework are pivotal factors influencing academic success. Learning occurs within a social context, both inside and outside the classroom (Hrastinski 2009), and is contingent upon students' perceptions of the accounting profession as well as their personal background, self-esteem, and social interactions. These elements collectively motivate students to excel in their studies and enhance their satisfaction with the overall learning experience. (Hong and Gardner 2019; Malan 2020). Hence, recognizing the significance of how increased motivation contributes to heightened coursework engagement is crucial. This understanding ultimately fosters a more dynamic and productive learning environment, which is essential for promoting the accounting profession among undergraduate students.

Given this multifaceted nature of engagement, it is evident that students' motivation plays a pivotal role. Highly motivated students are more likely to be deeply engaged in classroom activities. As such, a positive relationship is anticipated between students' motivation to learn accounting and taxation and their level of engagement in classroom activities.

Based on the above framework, the following hypothesis was formulated:

Hypothesis 2 (H2). There is a positive and direct relationship between accounting and taxation students' motivation and their engagement in coursework.

Students' motivation can be nurtured by various factors, including perceptions of job security, opportunities for advancement, personal beliefs (Ng et al. 2017; Mustapha and Abu Hassan 2012), expertise, and search for meaning and security (De Magalhaes and Wilde 2015), all of which significantly influence their career decisions. Furthermore, intrinsic and extrinsic motivation play pivotal roles in students' pursuit of professional accounting qualifications (Yudi et al. 2020).

Consequently, a positive relationship between accounting students' motivation and their career perceptions is anticipated. Motivated students are more likely to actively seek opportunities to enhance their skills beyond the confines of the classroom, engaging in extracurricular activities, internships, and professional development. They will actively pursue networking opportunities within the accounting community, participate in industry events, networking sessions, and mentoring programs.

Based on the above framework, the following hypothesis was formulated:

Hypothesis 3 (H3). *There is a positive and direct relationship between accounting and taxation students' motivation and their perceptions of future career.*

Among the extrinsic factors influencing undergraduate students' decisions regarding the pursuit of accounting and taxation studies and their perceptions of future career, career exposure emerges as one of the most pivotal. Career exposure pertains to students' exposure to pertinent information about a particular profession, often imparted during their academic training at university (Ng et al. 2017), either provided in universities during their educational training (Ghani et al. 2008; Miller and Wager 1971; DeZoort et al. 1997; Kavina and Pedras 1986; Erkut and Mokros 1984) or via professional bodies and associations, such as accounting associations. However, irrespective of whether students gain career exposure by university instructors and training or through information provided by professional bodies, it has been observed that students who possess a more comprehensive understanding of the accounting profession are more likely to opt for a career as an accountant (Hatane et al. 2021).

This trend extends to related fields like audit and taxation, which are frequently pursued by accounting students (Dalton et al. 2014). Consequently, students actively engaged in their coursework are expected to acquire a deeper knowledge of their prospective careers, enabling them to discern how their current academic pursuits will impact their future professional paths.

Based on the above framework presented, the following hypotheses have been formulated:

Hypothesis 4 (H4). *There is a positive and direct relationship between accounting and taxation students' engagement in coursework and their perceptions of future career.*

Hypothesis 5 (H5). *There is a positive and direct relationship between accounting and taxation students' perceptions about the accounting profession and their perceptions of future career.*

Additionally, it was also postulated that students' perceptions regarding a career in accounting would exert an influence on their perceptions of future career, through the mediating effect of motivation within the classroom, and that motivation would similarly influence students' perceptions of future career, with this relationship being mediated by students' active engagement in classroom activities. Consequently, the following hypotheses were put forth:

Hypothesis 6 (H6). Students' motivation has a positive mediating effect in the relationship between accounting and taxation students' perceptions about the accounting profession and their perceptions of future career.

Hypothesis 7 (H7). *Students' engagement has a positive mediating effect in the relationship between accounting and taxation students' motivation and their perceptions of future career.*

Figure 1 presents the conceptual model proposal. The abbreviations represent students' perceptions of the accounting profession (PRO), students' motivation (MO), students' engagement (ENG), and students' perceptions of future career (PP).

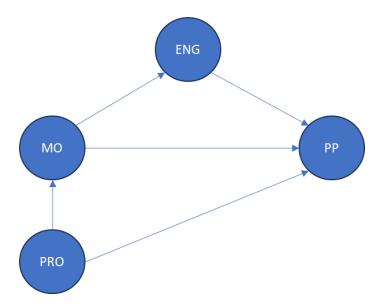


Figure 1. Conceptual model. PRO: perceptions of the accounting profession; MO: motivation; ENG: engagement; PP: perceptions of future career.

3. Methodology

3.1. Data

This study gathered data through an online survey administered to students enrolled in accounting and tax courses within the Bachelor's Degree in Management program at the School of Management, Polytechnic Institute of Castelo Branco-Polytechnic University (IPCB), Portugal. Specifically, students from three courses, namely Accounting and Financial Reporting, Corporate Taxation I, and Corporate Taxation II, were invited to participate, representing a total of 115 students. The survey was made accessible via the Moodle platform for each respective course, which directed respondents to an external platform where their responses were recorded.

Data collection occurred at the commencement of the summer semester for the 2022–2023 academic year, encompassing the subjects Reporting and Financial Accounting and Corporate Tax II. For Corporate Tax I, data collection took place at the outset of the winter semester for the 2023–2024 academic year. At the end of classes, students were informed about the survey, and instructions were provided about the response procedure and the study's overarching objectives, including specific guidance not to submit more than one response per questionnaire. Moreover, a detailed version of this information was also mentioned at the first stage of the survey before starting the survey questions, which also include the informed consent, to which a positive response enabled the survey to go forward. The survey remained active for one day, allowing students who were not present in class to submit their responses. Despite this extended availability, out of a total of 115 students, 23 students (20%) did not respond to the survey, representing a total of 92 (80%) valid responses for the analysis.

3.2. Measurement Models and Methods

The survey utilized a Likert-type scale with five points, where a rating of 1 corresponds to "strongly disagree" and a rating of 5 corresponds to "strongly agree". This study is a component of a broader research initiative focused on examining the perceptions of students studying taxation and accounting with regard to the accounting field and perceptions of future career in accounting and tax consulting.

The analysis conducted in this study aggregates 4 scales to assess four constructs represented in the structural model, depicting the student's perceptions about the accounting profession, students' motivation, students' engagement, and students' perceptions of future career.

The measurement model for PRO and PP variables, each comprising three items, was developed based on an extensive literature review, following the guidelines set forth by Nunnaly and Bernstein (1994). The content validly was assessed with the help of a group of academics from IPCB, who provided their accordance regarding how well the items portray the measured dimension. The MO and the ENG scales were adapted from previous studies. The former is a reduced version of the Christophel (1990) scale, represented by 6 items in this study, and the latter includes 6 items, adapted from (Mazer 2012), both presenting good psychometric proprieties. Three additional items were included in the survey, assessing aspects such as nationality, gender, and course, and three more concerning the informed consent, due to the General Data Protection Regulation (GDPD).

This study is focused on the context of accounting and taxation students enrolled in the Bachelor's Degree program at the School of Management within IPCB. It seeks to enable an in-depth investigation of a particular unit or context, with the objective of extrapolating findings to a broader set of units or situations (Gerring 2004). The analysis of the structural model in this study was carried out using a Partial Least Squares Structural Equation Modeling (PLS-SEM) approach, and SmartPLS 4 software (Ringle et al. 2022) was employed to compute data. Results were subjected to analysis in accordance with the guidelines provided by Hair et al. (2022) on handling structural equation models using PLS.

4. Results

This research employed a component-based structural equation modeling (SEM) approach. The data were processed, and an evaluation of the measurement models was conducted. Measures of reliability and validity for each scale were extracted and thoroughly analyzed.

The reliability of indicators was assessed by examining their outer loadings. There are various proposals regarding the minimum values for outer loadings that should be retained as indicators, with suggestions ranging from 0.4 to 0.708 (Hair et al. 2022). According to these authors, indicators within this range should only be removed if their removal improves the composite reliability. Other recommendations propose that indicators below 0.55 should be eliminated because values below this threshold are considered less valuable in defining the variable (Falk and Miller 1992). In this study, a threshold of 0.60 was established. Table 1 displays that all the indicators' outer loadings exceeded the defined threshold. Additionally, it also presents the descriptive statistics: mean, median, standard deviation, skewness, and kurtosis. Pertaining to the indicators of deviation from normality (skewness and kurtosis), a pattern of responses is deemed to approximate a normal distribution when both skewness are regarded as indicative of an excellent approximation to normality (George and Mallery 2020).

Construct reliability, which assesses the internal consistency of a construct, was evaluated in this study using the composite reliability indicator. This choice is considered more suitable when testing models employing PLS (Hair et al. 2019, 2022). In advanced studies, values falling between 0.70 and 0.90 are generally deemed acceptable.

Convergent validity measures the extent to which a particular measure positively correlates with different measures of the same variable, while discriminant validity gauges whether a measure is genuinely distinct from other constructs within the same model. Convergent validity was evaluated using the Fornell and Larker (1981) criterion, which asserts that a measure demonstrates convergent validity if the Average Variance Extracted (AVE) value of the measure exceeds 0.50.

Item Code	Item	Outer Loadings	Mean	Median	Standard Deviation	Kurtosis	Skewness
	Motivation						
MO1	Motivated	0.828	3.802	4.000	0.794	0.348	-0.314
MO2	Stimulated	0.695	3.623	4.000	0.770	0.434	-0.232
MO3	Eager to study	0.787	3.566	4.000	0.869	-0.615	-0.162
MO4	Challenged	0.674	3.821	4.000	0.844	0.139	-0.409
MO5	Enthusiastic	0.849	3.519	3.000	0.882	0.104	-0.142
MO6	Excited	0.839	3.604	4.000	0.832	0.099	-0.336
ENG1	Engagement I listen carefully to the teacher's instructions during classes	0.773	4.028	4.000	0.758	-0.502	-0.311
ENG2	I pay full attention to the teacher during classes	0.832	3.783	4.000	0.813	-0.604	-0.113
ENG3	I share opinions and thoughts during class discussions	0.635	3.066	3.000	1.168	-0.913	0.194
ENG4	I reflect on how I can use the course materials in my daily life	0.794	3.679	4.000	0.996	0.247	-0.595
ENG5	I reflect on how the course materials relate to my everyday life	0.774	3.623	4.000	0.905	0.113	-0.411
ENG6	I reflect on how the course materials can benefit my career Perceptions of Future Career	0.721	4.094	4.000	0.807	-0.460	-0.503
PP1	Accounting classes made me more optimistic about my future professional outlook These subject classes contribute to	0.819	3.764	4.000	0.842	0.405	-0.585
PP2	improve my	0.879	4.038	4.000	0.764	-0.538	-0.322
PP3	professional prospects These subject classes will help my future professional career Perceptions of the	0.813	4.292	4.000	0.700	-0.874	-0.480
PRO1	Accounting Profession Accountants' profession is attractive	0.864	3.481	4.000	1.002	-0.153	-0.404
PRO2	Being an accountant is an interesting profession	0.919	3.651	4.000	1.073	-0.113	-0.562
PRO3	Accountants have good job prospects	0.715	3.991	4.000	0.746	-0.451	-0.261

Table 1. Items to variables outer loadings and descriptive statistics.

Discriminant validity was assessed using two distinct indicators. The first was the HTMT criterion (Henseler et al. 2015). The second method involves comparing the square roots of the AVE values with the correlations between latent variables, as proposed by Fornell and Larker (1981). According to the latter approach, a measure exhibits discriminant validity if the square root of each construct's AVE is greater than its highest correlation with any other construct, which helps ensure that each measure possesses discriminant validity (Hair et al. 2022).

Table 2 presents an overview of construct reliability, convergent validity, and discriminant validity, which are assessed through the measurement models' composite reliability, Average Variance Extracted (AVE) values, and the square root of the AVE values, respectively.

	Reliability	Convergent Validity	Discriminant Validity			
Construct	Composite Reliability	Average Variance Extracted (AVE)	ENG	MO	Р	PRO
ENG	0.889	0.574	0.757			
MO	0.904	0.612	0.698	0.782		
PP	0.876	0.701	0.662	0.684	0.837	
PRO	0.874	0.701	0.385	0.514	0.507	0.837

Table 2. Construct reliability and validity.

The results presented in Table 2 indicate that all the measurement models exhibit AVE values and composite reliability scores exceeding the minimum threshold. Specifically, the AVE values surpass the 0.50 threshold, thereby confirming the attainment of convergent validity. Additionally, the square root of each variable exceeds the latent variable correlation, providing confirmation of discriminant validity. Moreover, the composite reliability scores for all variables are above 0.70, signifying the reliability of the constructs under examination (Hair et al. 2022; Nunnaly and Bernstein 1994).

Discriminant validity was also evaluated using the HTMT criterion (Henseler et al. 2015). Table 3 shows the HTMT criterion results.

Table 3. Discriminant validity—HTMT criterion.

D (1		Confidence Interval			
Path	HTMT Ratio —	5.0%	95.0%		
MO <-> ENG	0.793	0.688	0.885		
PP <-> ENG	0.803	0.689	0.903		
PP <-> MO	0.820	0.718	0.906		
PRO <-> ENG	0.481	0.306	0.648		
PRO <-> MO	0.617	0.463	0.765		
PRO <-> PP	0.643	0.499	0.778		

Bootstrapping 95%, confidence interval based on 10,000 samples, one-tailed test.

The results presented in Table 3 indicate that all HTMT values are notably below the specified threshold of 0.85. Consequently, the HTMT criterion unequivocally demonstrates the discriminant validity of the constructs (Henseler et al. 2015; Hair et al. 2022).

The analysis of the structural model was subsequently carried out through SEM, allowing for the examination of relationships between variables within constructs and the assessment of the proposed hypotheses. As a result, the relationships posited in the model were scrutinized. Table 4 provides a concise summary of the hypotheses and their corresponding effects.

Table 4. Summary of hypotheses and effects.

Hypotheses	Coefficient Path (c)	Direct Effect	Indirect Effect	Percentile Bootstrap 95% Confidence Interval		t	Significance
				Lower Band	Upper Band	Statistics	(p < 0.05)?
H1	PRO -> MO	0.514		0.385	0.639	6.584	Yes
H2	MO -> ENG	0.698		0.624	0.786	14.082	Yes
H3	MO -> PP	0.337		0.152	0.504	3.137	Yes
H4	ENG -> PP	0.349		0.200	0.505	3.770	Yes
H5	PRO ->PP	0.199		0.053	0.346	2.234	Yes
H6	PRO -> MO -> PP		0.173	0.076	0.278	2.794	Yes
H7	MO -> ENG -> PP		0.244	0.143	0.366	3.590	Yes

Bootstrapping 95%, confidence interval based on 10,000 samples, one-tailed test.

The results (Table 4) present the direct effects and the specific indirect effects. To assess the meditating effects (indirect effects), the Preacher and Hayes (2008) procedure was used, which is common in empirical studies (Castro and Roldán 2013; Sampaio et al. 2021), and Hair et al. (2022) guidelines were followed.

The obtained results confirmed the proposed hypotheses. The results showed a positive and significant direct effect of students' perceptions about the accounting profession on students' motivation (H1: c = 0.514, t-value = 6.584), students' motivation on students' engagement (H2: c = 0.698, t-value = 14.082), students' motivation on perceptions of future career (H3: c = 0.337, t-value = 3.137), students' engagement on perceptions of future career (H4: c = 0.349, t-value = 3.770), and students' perceptions about the accounting profession on students' perceptions of future career (H5: c = 0.199, t-value = 2.234). Regarding the indirect effects, the results indicate that students' motivation has a positive indirect effect on the relation between students' perceptions about the accounting profession and their perceptions of future career (H6: c = 0.173, t-value = 2.794) and that students' engagement has a positive indirect effect on the relationship between students' motivation and their perceptions of future career (H7: c = 0.244, t-value = 3.590). These results confirm the presence of a complementary mediation, i.e., both direct and indirect effects are significant, pointing to the same direction (positive) (Hair et al. 2022).

The explanatory power of the proposed model was expressed through the coefficient of determination R^2 . This indicator represents the variance in dependent variables explained by the independent variables within the model and represents a predictive accuracy measure. R^2 values of 0.67, 0.33, or 0.19 are described as substantial, moderate, or weak, respectively (Chin 1998). The results (Figure 2) show that 24.6% (0.264*100) of variance in the endogenous variable MO is explained by the exogenous variable PRO. The R^2 =0.488 of variable ENG means that 48.8% of the variable variance is explained by the combined effects of variables PRO and MO. Moreover, the R^2 = 0.563 of variable PP means that 56.3% of this variable variance is explained by the combined effects of the exogenous variable variance is explained by the combined effects of the variable variance is explained by the combined effects of the variable variance is explained by the combined effects of the variable variance is explained by the combined effects of the variable variance is explained by the combined effects of the variable variance is explained by the combined effects of the exogenous variables PRO, MO, and ENG. Overall, the results show a moderate explanatory power among all variables.

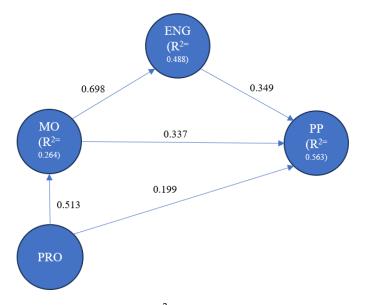


Figure 2. Structural model R². PRO: perceptions of the accounting profession; MO: motivation; ENG: engagement; PP: perceptions of future career.

The predictive power of the proposed model was tested using the Q^2_{predict} indicator. The results showed that the all variables present a $Q^2_{\text{predict}} > 0$, and the majority yield smaller prediction errors compared to the linear regression model (Shmueli et al. 2019), which indicates that the model presents a medium predictive power.

The effect size f^2 was also assessed to evaluate the change in the R² when a specified independent variable is omitted from the model. This indicates whether the removed variable produces a relevant impact in the endogenous variables (Hair et al. 2022). The results show that removing the ENG variable from the model produces an effect size of 0.143 in the R² of variable PP, removing the MO variable produces an effect size of 0.951 in the R² of variable ENG and of 0.115 in the R² of variable PP, and removing the PRO variable produces an effect size of 0.358 in the R² of variable MO and of 0.067 in the R² of variable PP. Effect size results of 0.35, 0.15, and 0.02, represent large, medium, and small effects, respectively (Cohen 1988). Figure 2 presents the structural model, the direct effects, and the obtained R² results.

5. Discussion and Conclusions

The obtained results provided strong support for the proposed hypotheses. Specifically, students' perceptions of the accounting profession were found to have a significant and positive effect on their motivation in classes. This finding is consistent with previous research in the field, particularly studies focused on accounting students and their views on the accounting profession (Ng et al. 2017). It also aligns with earlier research indicating that students' motivation can be influenced by their perceptions of the accounting profession, particularly in terms of how it offers a favorable benefit-cost ratio (Ahmed et al. 1997) or how positive perceptions of accounting can enhance students' academic performance (Ferreira and Santoso 2008). In light of these results, it is evident that the way students perceive the accounting profession has a notable impact on their motivation towards accounting and taxation classes. Furthermore, the confirmed positive mediating effect of motivation on the relationship between perceptions of the profession and students' perceptions of future career underscores the significance of students' perceptions of the profession in shaping their career outlook. However, despite the observed direct effect between students' perceptions of the accounting profession and perceptions of future career, the attained complementary mediation indicates that a substantial part of the effect of perceptions about profession on perceptions of future career is channeled by the indirect effect on students' motivation. This aspect is confirmed by previous research about the issue, particularly the study emphasizing the effect of external stimuli on students' motivation towards classwork and perceptions of future career (Ng et al. 2017).

Furthermore, the study revealed a positive relationship between students' motivation and their engagement in classes, which aligns with the proposed inherent connection between these two dimensions. Motivation encompasses a person's pursuit of a goal, which can involve both intrinsic and extrinsic elements, often serving as an instrumental objective to achieve an external goal (Reiss 2012). Consequently, motivated students are inclined to invest their efforts, time, and energy into learning tasks, studying, and engaging with colleagues, classmates, and teachers regarding course content and activities (Kuh 2009; Pace 1990), tasks that define the meaning of engagement.

Additionally, the results demonstrated a positive relationship between motivation and perceptions of future career, in line with previous research findings (Ng et al. 2017), as well as between students' engagement and perceptions of future career. Highly engaged students in class activities are likely to anticipate positive outcomes in their future careers. This finding is consistent with prior research suggesting that undergraduate students initiate their identity and employability development by aligning themselves with a particular subject or course (Lundberg and Krogstie 2020) and underscores the mediating role of students' engagement in the relationship between motivation and perceptions of future career.

This study yields several significant insights into the factors that influence students' perceptions of future career. Previous research has revealed that both accounting and non-accounting students often hold conflicting views about accounting and accountancy, characterized by a combination of high status and low esteem (Fisher and Murphy 1995), perceptions sometimes formed and reinforced during introductory accounting courses (Mladenovic 2000). These stereotypes and the ones usually observed in the general public,

with accountants viewed as lifeless, shallow, passive, and aloof (Beard 1994; Bougen 1994; Richardson et al. 2014), as well as the threats and challenges accounting profession faces, such as information and technology development (Mohamed and Lashine 2003), cloud computing and continuous accounting, artificial intelligence, and big data in accounting reporting (Gulin et al. 2019), as well as blockchain technology (Sinha 2020), present opportunities to challenge and reshape these established stereotypes. Hence, during the ongoing crisis in the accounting profession, marked by declining enrollment in accounting programs and decreased participation in CPA exams (Burke and Polimeni 2023), presenting the study of accounting and taxation, the accounting profession, and accountants in a more attractive way to undergraduate students has the potential to enhance trust among the general public, clients, and professionals in the accounting field and its professional associations.

From a theoretical perspective, this research sheds light on how students' perceptions indirectly influence, through motivation, and motivation through engagement, their perceptions of future career. This issue provides further knowledge to previous evidence about these interrelations. It also emphasizes the importance of improving students' motivation with accounting and taxation classes to enhance their perceptions of future career and avoid negative stereotypes on professionals and professional associations. From a practical standpoint, this study provides additional information for teachers, professionals, and professional associations on the relevance of creating innovative and attractive polices towards undergraduate students to attract the best ones to the profession. Furthermore, the obtained results demonstrate the interrelationships between the models' variables and how they affect each other, providing insights about similar professions with similar paths such as engineers, academics, or IT professionals.

This study does have some limitations that are worth noting. The most notable limitations pertain to the relatively small number of responses and the potential challenges in generalizing the findings. Regarding the number of responses, it is important to mention that despite the relatively small sample size, the responses obtained are deemed sufficient to provide a high degree of confidence in the study's results (Hair et al. 2022). Moreover, while the study results may raise concerns about generalizability, the chosen methods seem to be the most appropriate tool for addressing the research objectives in this study. These limitations also open up avenues for future research. Subsequent studies could aim to expand the analysis to include data from other higher education institutions, providing a larger dataset, carrying out a comparative study with higher education institutions from another country, and potentially enhancing the generalizability of the results.

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References

Ahmed, Kamran, Kazi Feroz Alam, and Manzurul Alam. 1997. An Empirical Study of Factors Affecting Accounting Students' Career Choice in New Zealand. International Journal of Phytoremediation 21: 325–35. [CrossRef]

American Accounting Association. 1966. A Statement of Basic Accounting Theory. Sarasota: American Accounting Association.

American Institute of Certified Public Accountants. 1953. *Review and Resume; Accounting Terminology Bulletins, No. 1.* New York: AICPA. Available online: https://egrove.olemiss.edu/dl_aia/356 (accessed on 5 October 2023).

- Beard, Victoria. 1994. Popular Culture and Professional Identity: Accountants in the Movies. *Accounting, Organizations and Society* 19: 303–18. [CrossRef]
- Bougen, Philip D. 1994. Joking Apart: The Serious Side to the Accountant Stereotype. *Accounting, Organizations and Society* 19: 319–35. [CrossRef]
- Burke, By Jacqueline A., and Ralph S. Polimeni. 2023. The Accounting Profession Is in Crisis. The CPA Journal 93: 6–8.
- Byrne, Marann, and Barbara Flood. 2005. A Study of Accounting Students' Motives, Expectations and Preparedness for Higher Education. *Journal of Further and Higher Education* 29: 111–24. [CrossRef]
- Carnegie, Garry D., and Christopher J. Napier. 2010. Traditional Accountants and Business Professionals: Portraying the Accounting Profession after Enron. Accounting, Organizations and Society 35: 360–76. [CrossRef]
- Castro, Ignacio, and José L. Roldán. 2013. A Mediation Model between Dimensions of Social Capital. *International Business Review* 22: 1034–50. [CrossRef]
- Chin, Wynne W. 1998. The Partial Least Squares Approach to Structural Equation Modeling. *Modern Methods for Business Research* 295–336. [CrossRef]
- Christophel, Diane M. 1990. The Relationships among Teacher Immediacy Behaviors, Student Motivation, and Learning. *Communication Education* 39: 323–40. [CrossRef]
- Cohen, Jacob. 1988. Statistical Power Analysis for the Behavioral Sciences, 2nd ed. Mahwah: Lawrence Erlbaum.
- Dalton, Derek W., Steve Buchheit, and Jeffrey J. McMillan. 2014. Audit and Tax Career Paths in Public Accounting: An Analysis of Student and Professional Perceptions. *Accounting Horizons* 28: 213–31. [CrossRef]
- De Magalhaes, J. Roberto A., and Harold Wilde. 2015. An Exploratory Study of the Career Drivers of Accounting Students. *Journal of Business & Economics Research (JBER)* 13: 155. [CrossRef]
- DeZoort, F. Todd, Alan T. Lord, and Barney R. Cargile. 1997. A Comparison of Accounting Professors' and Students' Perceptions of the Public Accounting Work Environment. *Issues in Accounting Education* 12: 281–98.
- Donald, Janet G. 1999. Motivation for Higher-Order Learning. New Directions for Teaching and Learning 1999: 27–36. [CrossRef]
- Dunne, Neil J., Niamh M. Brennan, and Collette E. Kirwan. 2021. Impression Management and Big Four Auditors: Scrutiny at a Public Inquiry. Accounting, Organizations and Society 88: 101170. [CrossRef]
- Erkut, Sumru, and Janice R. Mokros. 1984. Professors as Models and Mentors for College Students. *American Educational Research Journal* 21: 399–417. [CrossRef]
- Falk, R. Frank, and Nancy B. Miller. 1992. A Primer for Soft Modeling. Akron: University of Akron Press.
- Ferreira, Aldónio, and Andrijani Santoso. 2008. Do students' perceptions matter? A study of the effect of students' perceptions on academic performance. *Accounting and Finance* 48: 209–231. [CrossRef]
- Fisher, Roy, and Vivienne Murphy. 1995. A Pariah Profession? Some Student Perceptions of Accounting and Accountancy. *Studies in Higher Education* 20: 45–58. [CrossRef]
- Flores, Lisa Y., Chris Robitschek, Elif Celebi, Christie Andersen, and Uyen Hoang. 2010. Social Cognitive Influences on Mexican Americans' Career Choices across Holland's Themes. *Journal of Vocational Behavior* 76: 198–210. [CrossRef]
- Fornell, Claes, and David F. Larker. 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research 18: 39–50. [CrossRef]
- George, Darren, and Paul Mallery. 2020. *IMB SPSS Statistic 26 Step by Step: A Simple Guide and Reference*, 16th ed. New York: Routledge. Gerring, John. 2004. What Is a Case Study and What Is It Good For? *American Political Science Review* 98: 341–54. [CrossRef]
- Ghani, Erlane K., Jamaliah Said, Noraini Mohd Nasir, and Kamaruzaman Jusoff. 2008. The 21st Century Accounting Career from the Perspective of the Malaysian University Students. *Asian Social Science* 4: 73–83. [CrossRef]
- Gulin, Danimir, Mirjana Hladika, and Ivana Valenta. 2019. Digitalization and the Challenges for the Accounting Profession. ENTRENOVA-ENTerprise Research InNOVAtion 5: 428–37. [CrossRef]
- Hair, Joseph F., G. Tomas M. Hult, Christian M. Ringle, and Marko Sarstedt. 2022. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), 3rd ed. Thousand Oaks: SAGE Publications, Inc.
- Hair, Joseph F., Jeffrey J. Risher, Marko Sarstedt, and Christian M. Ringle. 2019. When to Use and How to Report the Results of PLS-SEM. *European Business Review* 31: 2–24. [CrossRef]
- Handelsman, Mitchell M., William L. Briggs, Nora Sullivan, and Annette Towler. 2005. A Measure of College Student Course Engagement. *Journal of Educational Research* 98: 184–92. [CrossRef]
- Hatane, Saarce Elsye, Fenia Agustin Gunawan, and Stella Wulan Pratama. 2021. Intrinsic Motivation, Career Exposure, and Quality of Life: How Do They Influence the Accounting Students' Career Choice? *Journal of Education and Learning (EduLearn)* 15: 335–45. [CrossRef]
- Henseler, Jörg, Christian M Ringle, and Marko Sarstedt. 2015. A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *Journal of the Academy of Marketing Science* 43: 115–35. [CrossRef]
- Hong, Yvonne, and Lesley Gardner. 2019. Undergraduates' Perception and Engagement in Facebook Learning Groups. British Journal of Educational Technology 50: 1831–45. [CrossRef]
- Hrastinski, Stefan. 2009. A Theory of Online Learning as Online Participation. Computers and Education 52: 78-82. [CrossRef]
- International Accounting Standards Board. 2018. Conceptual Framework for Financial Reporting. Available online: https://www.aasb.gov.au/admin/file/content105/c9/Conceptual_Framework_05-19_COMPdec21_01-22.pdf (accessed on 5 October 2023).

- Kavina, George, and Melvin J. Pedras. 1986. Higher Education Faculty as Role Models: A Perceptual Comparison between Students and Educators with Implications for the Improvement of Teaching and Educational Management. Available online: https://files.eric.ed.gov/fulltext/ED270037.pdf (accessed on 5 October 2023).
- Kuh, George D. 2009. The National Survey of Student Engagement: Conceptual and Empirical Foundations. New Directions for Institutional Research 141: 5–20. [CrossRef]
- Lent, Robert, Steven D. Brown, and Gail Hackett. 1994. Toward a Unifying Scct and Academic Interest, Choice and Performance. Journal of Vocational Behavior 45: 79–122. [CrossRef]
- Lundberg, Gunhild M., and Birgit R. Krogstie. 2020. Employability through Imagination, Alignment, AndEngagement-Students' Prospects and Change during Their First Year in Computing Education. Paper presented at ACM International Conference Proceeding Series, Koli, Finland, November 19–22.
- Malan, Marelize. 2020. Engaging Students in a Fully Online Accounting Degree: An Action Research Study. *Accounting Education* 29: 321–39. [CrossRef]
- Mazer, Joseph P. 2012. Development and Validation of the Student Interest and Engagement Scales. *Communication Methods and Measures* 6: 99–125. [CrossRef]
- Miller, George A., and L. Wesley Wager. 1971. "Adult Socialization, Organizational Structure, and Role Orientations. *Administrative Science Quarterly* 16: 151. [CrossRef]
- Mladenovic, Rosina. 2000. An Investigation into Ways of Challenging Introductory Accounting Students' Negative Perceptions of Accounting. *Accounting Education* 9: 135–55. [CrossRef]
- Mohamed, Ehab K. A., and Sherif H. Lashine. 2003. Accounting Knowledge and Skills and the Challenges of a Global Business Environment. *Managerial Finance* 29: 3–16. [CrossRef]
- Mustapha, Mazlina, and Mohammad Hasmawi Abu Hassan. 2012. Accounting Students' Perception on Pursuing Professional Examination. *International Journal of Education* 4: 1. [CrossRef]
- Newmann, Fred M., Gary G. Wehlage, and Susie D. Lamborn. 1992. The Significance and Sources of Student Engagement. In *Student Engagement and Achievement in American Secohry Schools*. Edited by Fred Newmann. New York: Teachers' College Press, pp. 131–52. [CrossRef]
- Ng, Yen Hong, Sue Pei Lai, Zhi Peng Su, Jing Yi Yap, Hui Qi Teoh, and Han Lee. 2017. Factors Influencing Accounting Students' Career Paths. *Journal of Management Development* 36: 319–29. [CrossRef]
- Nunnaly, Jum C., and Ira H. Bernstein. 1994. Psychometric Theory, 3rd ed. New York: McGrawHill.
- Pace, C. Robert. 1990. *The Undergraduate: A Report of Their Activities and Progress in College in the 1980's;* Los Angeles: Center for the Study of Evaluation, UCLA Graduate School of Education, p. 164. Available online: http://files.eric.ed.gov/fulltext/ED375701.pdf (accessed on 5 October 2023).
- Petra, Steven, and Andrew C. Spieler. 2020. Accounting Scandals: Enron, Worldcom, and Global Crossing. In *Corporate Fraud Exposed*. Bingley: Emerald Publishing Limited, pp. 343–60. [CrossRef]
- Pintrich, Paul R., Ronald W. Marx, and Robert A. Boyle. 1993. Beyond Cold Conceptual Change: The Role of Motivational Beliefs and Classroom Contextual Factors in the Process of Conceptual Change. *Review of Educational Research* 63: 167–99. [CrossRef]
- Preacher, Kristopher J., and Andrew F. Hayes. 2008. Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models. *Behavior Research Methods* 40: 879–91. [CrossRef]
- Reiss, Steven. 2012. Intrinsic and Extrinsic Motivation. Teaching of Psychology 39: 152–56. [CrossRef]
- Richardson, Peter, Steven Dellaportas, Luckmika Perera, and Ben Richardson. 2014. Towards a Conceptual Framework on the Categorization of Stereotypical Perceptions in Accounting. *Journal of Accounting Literature* 35: 28–46. [CrossRef]
- Ringle, Christian M., Sven Wende, and Jan-Michael Becker. 2022. SmartPLS 4. Oststeinbek: SmartPLS.
- Sampaio, Carlos A. F., Ricardo Gouveia Rodrigues, and José M. Hernández-Mogollón. 2021. Price Strategy, Market Orientation, and Business Performance in the Hotel Industry. *Journal of Global Information Management* 29: 85–102. [CrossRef]
- Shmueli, Galit, Marko Sarstedt, Joseph F. Hair, Jun Hwa Cheah, Hiram Ting, Santha Vaithilingam, and Christian M. Ringle. 2019. Predictive Model Assessment in PLS-SEM: Guidelines for Using PLSpredict. *European Journal of Marketing* 53: 2322–47. [CrossRef]
- Singh, Kusum, Monique Granville, and Sandra Dika. 2002. Mathematics and Science Achievement: Effects of Motivation, Interest, and Academic Engagement. *Journal of Educational Research* 95: 323–32. [CrossRef]
- Singh, Prakash. 2002. Collegiality in Education: A Case Study. South African Journal of Education 22: 56-64.
- Sinha, Soma. 2020. Blockchain—Opportunities and Challenges for Accounting Professionals. *Journal of Corporate Accounting and Finance* 31: 65–67. [CrossRef]
- Stage, Frances K., and Palisa D. Williams. 1990. Students' Motivation and Changes in Motivation during the First Year of College. Journal of College Student Development 31: 516–22.
- Yudi, Melissa Mam, Nurul Nadiah Ibrahim, Siti Aisyah Kamaruzaman, Nazreen Sahol Hamid, and Siti Syaqilah Hambali. 2020. Accounting Students' Motivation for Getting Professionally Qualified. *Environment-Behaviour Proceedings Journal* 5: 41–48. Available online: https://api.semanticscholar.org/CorpusID:231708929 (accessed on 5 October 2023). [CrossRef]

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