



Internal Factors Affecting Student Performance in Accounting Courses at a Vocational School

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Abstract

The purpose of this study is to examine the effects of the internal factors affecting the success of students in the accounting courses in the curriculum of a vocational school which is not specifically intended to provide accounting education. The multiple regression model, developed as a research method, tests seven independent variables on students graduating between 2011-2017. The results of the study show that high school education is influencing success in accounting courses. Findings show that the academic tendencies measured by the average grade of the students are one of the determinants of the success of both accounting courses. In addition, success in an accounting course taken in previous year affects success of accounting course taken in the following year. The results of the study are important in terms of making more accurate decisions to improve quality of education in terms of academic decision makers and educational advisors.

Keywords: Academic tendency; Student achievement; Accounting education; Regression analysis.

1. Introduction

It is always desired by educators to understand how students with different characteristics learn. Educators try to create methods and environments that facilitate the success of students in the lessons they have developed in order to support their learning and career success. However, while faculty deans and department heads are preparing their course schedules, they face limitations in educational resources such as faculty members, classrooms, and course materials. University administrators, scientific accreditation bodies, and politicians demand these resources be spent in the most appropriate way. The qualities and knowledge that the business world demands from its employees are one of the most important determinants of how educational resources are used. Therefore, it requires more time than ever for decision-makers to study how to improve student achievement.

In an accounting course, there are several factors that have an impact on the performance of the students. In order to increase the efficacy of teaching, it is necessary to have a better understanding of these relevant factors. Students have to master various financial concepts and basic algebraic operations to understand accounting. Accounting courses are often considered among the most difficult courses in business programs. In accounting courses, as many courses are, while some students are able to comprehend the content more quickly, others have put more effort into it. There are many determinants of student performance. It is difficult to objectively measure the determinants such as motivation or desire to be successful. On the other hand, factors such as academic preparation can be evaluated relatively easily via variables such as university entrance exam score, grades of prerequisite courses or cumulative grade point average of students.

A lot of research conducted on students enrolled in an accounting course has revealed the importance of various student teacher focused factors in the academic performance of students. The factors examined in these studies are generally related to the demographic and past-acquired qualities of students such as age, gender, origin, and success in previous lectures, grades, attendance and success in the university entrance exam. Other factors are related to features that affect the way of teaching such as the duration of teaching, the intensity of the curriculum, instructions given by the faculty or teachers and the format of the examination. Guney (2009) classifies the factors related to the performance in an accounting course as external and internal factors. Age, gender, origin, effort, class participation, numeracy skills, work experience, academic experience and career motivation are factors that are directly related to the student and therefore these are called internal factors. Factors related to the teaching and learning environment are the external factors for the students. The learner cannot intervene in these matters and cannot control them according to their own interests. These include examples of teaching methods and the exam format, the competence, and experience of the teacher, the quality of the course book and other course materials.

In this study, the variables that affect students' performances such as age, gender, students' background knowledge in accounting, mathematical infrastructure, statistical infrastructure and academic ability in the general grade average in two accounting courses have been examined. The impact of these variables has been analysed according to the student performance in the courses of Financial Accounting and Railway System Cost Analysis in the curriculum of Anadolu University Transportation Vocational School Railway Systems Management Program. The data used in the analysis has been gathered from official university records rather than from credibility

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controversial resources such as student surveys. This removes potential concerns about the reliability of the data reported in the sample being examined.

The rest of the paper is organized as follows: in the second part, there are literature studies and research hypotheses; in the third chapter, the research method is summarized; in the fourth chapter, the results are presented and the findings are discussed. In the last section, the results of the research, limitations, and suggestions for future research are included.

2. Literature Review and Hypotheses

In education literature, student performance has been found to have many determinants. Six variables (gender, age, academic ability, accounting, mathematics and statistics infrastructure) and their impact on performance have been examined in this study in order to contribute to the knowledge of accounting education literature. However, unlike the previous research, these factors have been tested according to the academic achievement of the students in the accounting courses in the curriculum of a vocational school, which does not mainly aim to train accountants.

2.1. Gender

Different conclusions have been reached via various studies on the influence of students' genders on their accounting courses performances. [Byrne and Flood \(2008\)](#) reported that there was no significant relationship between gender and performance of students taking financial accounting and management accounting courses. The results support previous studies of similar characteristics ([Duff, 2004](#); [Paver and ve Gammie, 2005](#)). On the other hand, [Schmidt and Ve Wartick \(2014\)](#) have only established a relationship between gender variation and student performance in the course of accounting information systems, in the course of their work to discover determinants of student performance in accounting principles, cost accounting, advanced accounting, accounting information systems, auditing and tax accounting courses. The results demonstrated that female students had better performance outcomes than male students. It has been found that female students are more successful than male students in many similar species studies [Baard et al. \(2010\)](#); [Wally-Dima and Mbekomiza \(2013\)](#). In contrast to these studies, [Koh and ve Koh \(1999\)](#) found that males who studied in an accounting program perform better than females during their education. [Weil et al. \(2004\)](#) also shows that men have the better achievement of learning outcomes than girls. Gender can be an indicator of the performance of students in accounting courses in the light of the results of many previous studies ([Arthur and ve Everaert, 2012](#); [Doran et al., 1991](#); [Garkaz et al., 2011](#); [Gracia and ve Jenkins, 2002](#)). This claim is expressed in the following hypothesis:

H1: There is a significant relationship between the success of students in their accounting courses and their gender.

2.2. Age

It can be said that age as a sign of the academic performance of accounting students is largely neglected in the accounting education literature ([Bartlett et al., 1993](#); [Duff, 2004](#)). When the studies are taken into consideration, it is understood that the age variable does not have a definite effect on the performance of the students. [Koh and ve Koh \(1999\)](#) found that younger students perform better in an accounting program. Likewise, [Li et al. \(2010\)](#), they found a negative relationship between the learner's performance and age. Older students had a lower grade. [Müller et al. \(2007\)](#) support this relationship. In contrast to these studies, [Lane and ve Porch \(2002\)](#) found that older students perform better in the field of accounting. However, [Triki et al. \(2012\)](#) reported that age does not affect performance. Similarly, [Papageorgiou \(2017\)](#) found that the age of first-year students did not affect the academic performance of accounting students.

According to the findings from previous studies, it should be debated whether the age of students in accounting classes is a determinant of the academic performance or not. Having taken the previous studies into consideration, it is not possible to state the exact direction of the effect of age on performance. Exploring the impact of academic age on the academic performance of the researcher may be helpful in exploring more different findings on the sample studied or in making conclusions about other outcomes. For example, researchers who have discovered that older students are more successful can, therefore, suggest that mature students are more disciplined. On the other hand, research that finds older students as unsuccessful may argue that students who have to engage in different occupations at a later age will find less time to study. We may measure the effect of age on our performance with the following hypothesis.

H2: There is a significant relationship between the success of the students in their accounting classes and their age.

2.3. Accounting Background

The accounting education that students receive before the university can have an impact on their performance in university accounting courses. Cognitive Entry Behaviours are the knowledge, skills, and competence required to learn a task or set of tasks and these make it easier to learn a new topic [Bloom \(1976\)](#). The first studies on preliminary information showed that students who did an accounting course at high school did not have a different performance than those who did not do an accounting course [Baldwin and ve Howe \(1982\)](#). Some later study also supports the above-mentioned result [Byrne and Flood \(2008\)](#).

[Bonaci et al. \(2010\)](#) found that students from economics high school in Romania performed better in a financial accounting course at university. [Gul and ve Fong \(1993\)](#) and [Hartnett et al. \(2004\)](#) emphasized that there is a statistically meaningful relationship between students' pre-university accounting education and university accountancy achievement. [Doran et al. \(1991\)](#) have achieved more complex conclusions about the impact of past accounting knowledge on academic performance in university accounting courses. According to this, high school

accounting information affects the performance at the university level positively in the first accounting courses but negatively in the subsequent accounting courses. On the other hand, Al-Twaijry (2010) reported that pre-university accounting knowledge affects student performance positively in Advanced Management Accounting course and that there is no significant relationship with performance in Cost Accounting and Management Accounting courses. Gammie *et al.* (2003) determined that the high school graduation had no effect on the ranking of accounting and finance honour students. The impact of high school accounting knowledge on the academic performance of the student at the university level can be expressed by the hypothesis below:

H3: There is a significant relationship between the success rates of students who have studied high school accounting courses in the accounting courses they do at university, and whether they have studied in high school accounting courses.

Another research issue of studies aiming to discover whether the preliminary information is a determinant of student performance is whether the performance of previous compulsory or non-compulsory accounting courses has influenced success in subsequent accounting courses. Rohde and ve Kavanagh (1996) found that the most important variable in predicting student performance in studying the factors that affect student performance in the Principles of Management Accounting class is the note in the prerequisite course (Financial Accounting) of the student. Eikner and ve Montondon (2001) find that performance in the first accounting course is significantly related to the grade in the Accounting Principles course. In another study, Drennan and ve Rohde (2002) found that the success of the management accounting course taken earlier was related to the success of the students in subsequent courses. Tickell and ve Smyrnios (2005) found that the performance of an accounting program in the previous year was significantly correlated with better performance in the coming years. Similarly, Bealing *et al.* (2008) found that the performance achieved in previous accounting courses was statistically significant to predict the performance of subsequent accounting courses. In another study, Maksy (2012) reported a meaningful relationship between student performance of the initial accounting course (Current Topics in Financial Accounting) and performance of the advanced accounting course (Advanced Accounting). We have established the following hypothesis to reveal this relationship that the literature supports.

H4: There is a meaningful relationship between the success of the students in the accounting courses they have taken and the success of the accounting courses they have taken afterward.

2.4. Mathematical Background

Mathematics is regarded as a scientific language, and in some courses, basic math skills may be needed to achieve high academic performance. The accounting education literature has contradictory results about the influence of the mathematical knowledge of the student as a determinant of student performance. Bartlett *et al.* (1993) found that mathematics knowledge is not related to the performance of the student in accounting courses. Similarly, Naser and Peel (1998) reached the conclusion that there was no significant effect of mathematical notes on the academic performance of accounting students. On the other hand, Eskew and ve Faley (1988) and Gul and ve Fong (1993) found that mathematical knowledge is an important determinant of student performance in the introduction to accounting. Koh and ve Koh (1999) found that the academic background of mathematics affects the performance of accounting students positively. Gist *et al.* (1996) found that the performance of mathematical skills on the performance of the Accounting Principles course was higher in the mathematics lesson B and the grades of the undergraduates in the mathematics lesson. Kealey *et al.* (2005) found a positive relationship between a good academic mathematical background and the success of the Accounting Principles course. Guney (2009) has achieved the same results for many accounting courses. Fedoryshyn *et al.* (2010) found that arithmetic reasoning did not explain a significant part of a student's introductory course final grade in accounting, but found a strong relationship between the two. Seow *et al.* (2014) provided evidence that mathematical abilities are related to the academic performance of students throughout the undergraduate accounting program. In the past, we tested the relationship between mathematical skill and accounting lecture performance with the following hypothesis.

H5: There is a significant relationship between the success of the students' in a mathematics course and the success in an accounting course.

2.5. Statistics Background

Especially statistical information is likely to be needed in order to understand some accounting courses. For this reason, there may be a relationship between students' academic performance and past statistical information in accounting courses. Eskew and ve Faley (1988) found that students' performance at the university level improved the performance in the Introduction to Accounting course. Marcal and ve Roberts (2001) concluded that students who succeeded in the statistics course were more successful in the Financial Principles course. Brookshire and ve Palocsay (2005) determined that the performance of the Management Science course is significantly related to the Statistical course grades. In another study, Kirk and ve Spector (2006) found that the achievements of the students in the statistical course were significantly related to the Cost Accounting performance. Similarly, in a study of Shaban (2015) on 113 accounting students, a significant positive correlation was found between the performance of the Business Statistics course and the cumulative averages of accounting students. We used the following hypothesis to reveal this relationship that the literature supports.

H6: There is a meaningful relationship between the success of students' in a statistics course and the success in an accounting course.

2.6. Academic Tendency (Grade Point Average)

In many previous studies, it was understood that the academic tendency was an important determinant of student performance (Borde *et al.*, 1996; Byrne and Flood, 2008; Doran *et al.*, 1991; Eskew and ve Faley, 1988; Koh and ve Koh, 1999). In the accounting literature, standard measures such as University Entrance Examination Score, Academic Evaluation Test (Scholastic Assessment Test) and Grade Point Average were used to measure academic tendency (Papageorgiou and ve Halabi, 2014). It is rational and practical to measure students' performance by grade level. In the literature, the most commonly used determinant is average grade used to measure student performance (Benligiray and ve Onay, 2017). Mohrweis (2010) emphasized the academic tendency as a decisive indicator of student performance. Kirk and Spector (2006) found that the overall grade average had a positive effect on the cost accounting course performance. Eskew and ve Faley (1988) and Doran *et al.* (1991) found that the academic tendency is one of the most important determinants of exam performance and overall academic performance in Accounting Principles I and II. Papageorgiou and ve Halabi (2014) that the academic tendency measured by the average of the general grades at three different accounting levels, which consisted of various accounting courses, was among the determinants of student performance at three accounting levels in the study of performance factors on 677 students. In our study, the academic tendency was measured by the overall grade average. The impact of the academic tendency on performance can be tested with the following hypothesis.

H7: There is a significant relationship between students' grade point average (GPA) and the success in an accounting course (grade averages).

3. Data and Methodology

The data used in the research were obtained by examining the transcripts of 106 students who graduated from Anadolu University Vocational School of Transportation School of Transportation Pre-Graduate Program between 2011-2017 (five years). The data from the student work unit of the school consist of data on the student's date of birth, gender, personal information (such as high school graduation, success grade in the courses in the academic program (letter grade) and graduation average) and academic performance.

When the research sample and the relations aimed are taken into consideration, a multiple regression model was chosen as the research method. Regression analyses consist of a series of statistical techniques that evaluate the relationship between a dependent variable and several independent variables (Tabachnick and ve Fidell, 2013). Since an unbiased estimate of which of the independent variables is more related to student performance, standard multiple regression (enter method) was applied as the analysis technique.

Stevens (1996) argues that sampling requires at least 15 participants for each variable in order to establish a reliable model in social sciences research. However, Tabachnick and ve Fidell (2013) have developed a sample calculation formula that considers the number of independent variables. $N > 50 + m$ (m = number of independent variables) the two regression models we have proposed in our research are suitable for the study of the number of samples in the statistical literature in terms of the number of samples.

Another limitation of multiple regressions is that there are multiple common linearity relationships between the independent variables. Multicollinearity occurs when there is a very high level of correlation between $r = 0.9$ and above. Correlation tables of regression models should be examined beforehand to avoid this problem.

Table-1. Model 1 Correlation Table

Variables	F. Account Score	Age	Gender	Accounting Background	Academic Tendency	Mathematical Background
Fin. Accounting Score	1					
Age	-.187*	1				
Gender	.151	-.148	1			
Accounting Background	.325*	-.054	.125	1		
Academic Tendency	.524*	-.202*	.194*	.173	1	
Mathematical Back.	.207*	.001	.011	.214*	.382*	1

* shows 0.05 level of significance

Table-2. Model 1 Correlation Table

Variables	R. S. C. Accounting Score	Age	Gender	Acc. Back.	Pre. Achiev.	Math. Back.	Statist. Success	Aca. Ten.
R. S. C. Acc. Score	1							
Age	-.126	1						
Gender	.109	-.148	1					
Accounting Background	.348*	-.054	.125	1				
Prerequisite Ach.	.183*	-.187*	.151	.325*	1			
Mathematical Back.	.425*	.001	.011	.214*	.207*	1		
Statistical Success	.393*	-.311*	.117	.182*	.364*	.268*	1	
Academic Tendency	.490*	-.202*	.194*	.173*	.524*	.382*	.618*	1

* shows 0.05 level of significance

3.1. Research Models and Variables

The multiple regression model of the study is defined as:

Model 1: Financial Accounting Success = $\beta_0 + \beta_1 AGE_i + \beta_2 GENDER_i + \beta_3 ACCOUNTING BACKGROUND_i + \beta_4 ACADEMIC TENDENCY_i + \beta_5 MATHEMATIC BACKGROUND_i + e_i$

Model 2: Rail System Cost Accounting Success = $\beta_0 + \beta_1 AGE_i + \beta_2 GENDER_i + \beta_3 ACCOUNTING BACKGROUND_i + \beta_4 PREREQUISITE ACHIEVEMENT_i + \beta_5 MATHEMATIC BACKGROUND_i + \beta_6 STATISTICAL SUCCESS_i + \beta_7 ACADEMIC TENDENCY_i + e_i$

Variables and measurement methods included in the model are presented in the table.

Table-3. Model Variables

Dependent variable	Measurement Method
Financial Accounting Success	Financial Accounting Score
R. S. Cost Accounting Success	Ray System Cost Accounting Score
Independent variable	
Age	Age of student
Gender	Male=0
	Female=1
Accounting Background	Student has taken a high school accounting course =1
	Student has't taken a high school accounting course =0
Academic Tendency	Grade Point Average
Prerequisite Achievement	Financial Accounting Score
Statistical Success	Statistical Score
Mathematical Background	Mathematic Score

In order to make the analysis easier, numerical grades of letter grades were arranged according to the credit system in student transcripts that have been utilized from Anadolu University's Score Transformation Table in order to convert letter grades to numerical grades.¹

Table-4. Score Conversion Table

AA 4.00	BB 3.00	CC 2.00	DD 1.00
AB 3.70	BC 2.70	CD 1.70	FF 0.00
BA 3.30	CB 2.30	DC 1.30	

3.2. Descriptive Statistics

Descriptive statistics of dependent and independent variables are given in the table. The average of the performances of the students in Financial Accounting and Railway System Cost Accounting courses and the performances in Mathematics and Statistics courses, which are estimated to affect the dependent variables, are given. Besides this, averages of the GPA representing the academic tendency of the students are presented. As the table shows, the average age of the students in the sample is 20,792 and the majority of the students are male (85%). Also, few students (6) have studied accounting in high school.

Table-5. Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard Deviation
Grade Point Average	106	2.07	3.65	2.7420	.37416
MUH 151 F. Accounting Score	106	1.0	4.0	2.930	.7846
RAY238 R. S. C. Analysis Score	106	1,0	4,0	2.556	1.0210
İST 201 Statistical Score	106	1.0	4,0	2.511	.8861
Mat1 Mathematical Score	106	1.0	4,0	2.270	0.897952
Age	106	19.0	37.0	20.792	2.0918
				N	Yüzde %
Gender			Erkek	16	85%
			Kız	90	15%
Accounting Background					
Student has taken a high school accounting course				6	5.7%
Student has not taken a high school accounting course				100	94.3%

3.3. Regression Output

Multiple regression analysis was applied to assess the performance of students in financial accounting class of five independent variables in Model 1 and the extent to which students predicted the performance of the six independent variables in model 2 in R. S. cost analysis course. The table shows the relationship between dependent variables in model 1 and model 2 (performance of students in financial accounting and R. system cost analysis

¹ <https://www.anadolu.edu.tr/ogrenci-isleri/orgun-bilgi-ve-belgeler/senato-ve-yonetim-kurulu-kararlari/not-karsiliklari-ve-yabanci-dil-sinavleri-esdegerlikleri>

courses) and independent variables. Accordingly, the model is statistically significant and it is understood that the R-square, which is evaluated as the total disclosure rate on the student performances in the accounting courses of the independent variables included in the models, is compatible with previous studies in the literature. It is also understood that R-square value is related to student performance, other internal factors not included in the predicted model, and external factors related to the educationist and learning environment are in consistency.

Table-6. Model Results

	Coefficient	Stan. Beta Coefficient	t-statistic	p-value	Tolerance Value	VIF
<i>Model 1: Financial Accounting Course Student Performance (Dependent Variable)</i>						
Model Constant	.783		.869	.387		
Age	-.029	-.076	-.903	.368	.940	1.063
Gender	.041	.019	.222	.825	.936	1.068
Accounting Background	.833	.242	2.879	.005*	.933	1.072
Academic Tendency	1.007	.473	5.141	.000*	.783	1.277
Mathematical Background	-.022	-.025	-.282	.779	.820	1.219
<i>R=.582 R-square=.338 Adjusted R-Square=.305 F value=10.221 (p value=.000)</i>						
<i>Model 2: Rail System Cost Analysis Course Student Performance (Dependent Variable)</i>						
Model Constant	-.165		-.147	.883		
Age	-.018	-.038	-.449	.654	.877	1.140
Gender	.029	.010	.126	.900	.935	1.070
Accounting Background	1.213	.276	3.245	0.002*	.856	1.168
Prerequisite Achievement	-.261	-.204	-2.111	0.037*	.662	1.511
Mathematical Background	.264	.232	2.668	0.008*	.817	1.224
Statistical Success	.117	.101	.975	.332	.575	1.740
Academic Tendency	1.061	.389	3.379	0.001*	.468	2.139

R=.627 R-square=.393 Adjusted R-Square=.350 F value=9.083 (p value=.000)

* shows 0.05 level of significance

Two data showing that we have not experienced the problem of multicollinearity in our model are the tolerance value and VIF (Variance Inflation Factor) we have on the table. For a good model, it is expected that the tolerance values are not less than 0.10 and that the VIF value is not greater than 5. As seen in the table, there is no multicollinearity problem in the models.

4. Findings

4.1. Age and Gender Variables

According to the results obtained from the regression analysis, there was no significant relationship between the success of the students in accounting courses and their age and gender. In the majority of similar studies, no statistically significant relationship was found between the age and gender of students and the accounting course success.

4.2. Accounting Infrastructure (Accounting Background)

According to the values in the table, a statistically significant relationship was found between students' high school accounting classes and achievement in both financial accounting and rail system cost analysis courses. There is also a significant relationship between the success of the cost analysis course and the success of the financial accounting course, which is an accounting course that must be taken before in the curriculum. The results have been reported in terms of similar relationships from previous studies.

4.3. Mathematical and Statistical Knowledge

The results of the regression analysis show that there is no statistically significant relationship between students' mathematical knowledge and financial accounting course success and that there is a meaningful relationship between the cost analysis course successes on the other hand. On the other hand, it is reported that the statistical information of the students is not related to the cost analysis course success. It has been understood that when the learning outputs of the accounting courses in the curriculum of the Rail System Management Program are examined, it is aimed to teach the mathematical operations in the cost analysis course² while financial accounting course does not include the objectives that require mathematical operations between learning outputs. It is aimed to teach calculation of stock costs, calculation of labour costs and calculation of general production costs of students in the scope of learning output of the railway systems cost analysis course. It is also aimed to teach the cost distributions according to the direct, gradual and mathematical distribution methods to students within the scope of the learning outcomes of the cost distributions.³ In this respect, the results obtained from the sample are in consistent with the aims of the academic curriculum.

² <http://abp.anadolu.edu.tr/tr/ders/ogrenimCikti/127383/49>

³ <http://abp.anadolu.edu.tr/tr/ders/ogrenimCikti/127394/49>

4.4. Academic Tendency

One of the most important determinants of students' success in accounting courses is the academic tendency of students. The most rational and practical method to measure the academic tendency in the literature is grade point average; the most frequently used independent variable. The results of this study support that there is a strong correlation between students' grade point average and success in both financial accounting and cost analysis courses, consistent with a significant majority of similar studies in the past.

5. Conclusion and Discussion

The results of the study demonstrate that student performance in accounting courses in a vocational school specifically not intended for accounting education is a statistically significant relationship between students taking accounting courses during high school education and academic tendencies measured by the average grade of the students in our research. These findings may contribute to the oversight and orientation of acceptance policies to the accounting programs of universities, even if they are excluded from data obtained from a school specifically not intended for accounting education. Limitations arising from the research sample can be addressed in future studies on samples from accounting or business associate degree and undergraduate programs.

In order to increase the academic achievement of higher education institutions, it is necessary to examine the results obtained from similar studies in order to increase the academic success of the students and to improve the elements related to the teaching and learning environment which is not included in the scope of this study and which is defined as external factors in the literature. It will also contribute to the identification of variables that affect student achievement, the placement of students in academic departments appropriate to their academic potential, or the identification of areas where educational institutions that accept students without appropriate knowledge and skills should at least provide their students with more support for attaining the necessary knowledge and skills.

The most important result of our research is to prove on the sample that students who attended high school accounting course have achieved higher success in the accounting courses as expected. Based on the findings of the study, it has been understood that the decision of the students to make occupational plans without starting university education rather than university level reduces the risk of academic failure in education life to a minimum. In this context, it is suggested that the educational policies of our country should be revised in such a way as to give professional guidance to our students before high school education. The success of accounting courses in the future will enable studies to be conducted on selected samples from schools aimed at accounting education in particular, and those studies selected from schools aiming to train non-accounting professions and examining success in their own vocational courses can achieve results that can be used in the regulation of the education policies of our country.

It is the knowledge that faculty or higher education administrations can use in the preparation of curriculum for the accounting course, which is seen in high school and the increase in the accounting course in the undergraduate or graduate level. In addition, this finding may lead to an arrangement in which some students from certain high schools are exempted from certain classes. Thus, educational resources are divided into more useful areas and the quality of accounting education is increased. On the other hand, studies that do not examine other courses will contribute to guiding curriculum policies - not limited to accounting courses.

The consequences of the importance of academic skills in work have had important consequences for educators and policymakers. The importance of mathematics and statistics courses in accounting has been researched. The data obtained can be used to advise students who want to choose accounting profession, in particular by high school and university student counsellors. Mathematical knowledge, understood to be one of the factors affecting success in cost analysis, in our study, provides evidence that mathematical knowledge is advantageous to the educators who advise students who are considering choosing the accounting profession.

It is the limitations of studying that the research sample consists only of students who are studying at a university and are only in an associate degree program. In addition, the study of accounting courses as a dependent variable in research is another limitation of studying. It is important that new studies, particularly to investigate the influence of personal, financial and socioeconomic factors on the academic performance of accounting students, will enable us to influence the other factors on students' academic performance.

Decision makers to improve the quality of accounting education can use determinants of student performance found in the studies. In addition, increasing the academic achievement of the students of higher education institutions and developing the services they offer for this purpose will contribute to accreditation from independent accreditation organizations. Because many accreditation bodies focus on the educational quality of the educational institution in the accredited period and want to provide services that increase the student's success from the educational institution and thus provide quality assurance to the educational activities. The Association to Advance Collegiate Schools of Business (AACSB), the most important accreditation body on the international scale in accounting education, recently updated the standards it developed for accounting education in 2013. These standards cover the directives required by the educational institution to improve student achievement. Educational institutions will have the opportunity to develop policies that will enhance student achievement by taking advantage of the results of work and similar work in the future.

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