MAKÜ | Journal of Mehmet Akif Ersoy University
Economics and Administrative Sciences Faculty

e-ISSN: 2149-1658
Volume: 11 / Issue: 4
December, 2024
pp.: 1265-1284

Analysis of the Misconceptions Taking Accounting Education Students About Accounting Education: Example of TRB 1 Region

Meltem GÜL[1], Özcan DEMİR[2], Zülküf NARLIKAYA[3]

Abstract

Misconceptions are encountered in the field of accounting education as in every field. Since misconceptions in the field of education will affect the student's future life, these misconceptions should be identified and eliminated in advance. This study aims to determine the misconceptions of accounting education students about accounting education. For this purpose, the Misconceptions Analysis in Accounting Education (MAAE) scale was applied to the students who continue their education in the departments of business administration, business administration and accounting/tax practices at the undergraduate and associate degree level of state universities in TRB 1 region. The data collected within the scope of the research were analysed in SPSS 22 programme. According to the results of the research, it was determined that the perceptions of misconceptions about accounting of students studying accounting education are high, and the highest misconceptions are related to the idea that accounting is a recording process and students' general accounting knowledge. It has been observed that the general accounting course is perceived by the students as a course in which general information is given as an introduction to accounting. With this perception, the student associated the course as easier in his/her mind. However, when they are fully acquainted with accounting education, it becomes difficult for students to perceive the course as a result of the mismatch between their expectations and what they see. With the results obtained from the study, it is expected that the difficulties experienced by the students in accounting courses and the misconceptions they have acquired will be identified and will help to eliminate the mistakes that will be experienced in the name of accounting in the future. It is extremely important to eliminate these misconceptions in order to have a positive impact on the department that students choose as a profession, which will affect their future lives. Eliminating these misconceptions will undoubtedly contribute to increasing the quality of accounting education. It is thought that the results of the study will attract the attention of all academicians interested in accounting education, contribute to the way accounting academicians handle the course and contribute to the misconceptions in the literature.

Keywords: Accounting Education, Accounting Students, Misconception

1. Dr., Lecturer, Fırat University,
m.gul@firat.edu.tr,
https://orcid.org/0000-0002-8085-0704

2. Assoc. Prof. Dr., Fırat University,
odemir@firat.edu.tr,
https://orcid.org/0000-0001-9382-6781

3. Asst. Prof. Dr., Doğuş University,
znarlikaya@dogus.edu.tr,
https://orcid.org/0000-0002-2473-5509

https://doi.org/10.30798/makuiibf.1400121

Article Type	Application Date	Admission Date
Research Article	December 4, 2023	December 23, 2024

To cite this article: Gül, M., Demir, Ö., and Narlıkaya, Z. (2024). Analysis of the misconceptions taking accounting education students about accounting education: Example of TRB 1 region. *Journal of Mehmet Akif Ersoy University Economics and Administrative Sciences Faculty, 11*(4), 1265-1284. https://doi.org/10.30798/makuiibf.1400121

1. INTRODUCTION

An effective education is achieved through a comprehensive understanding of science concepts. Failure to understand or misunderstand the concepts will also lead to misunderstanding of the information intended to be given in education. Accounting education can be defined as educating students in determining, collecting, recording, summarizing, reporting, analyzing and auditing data that will guide decisions in the business (Ay, 2011). In order to have a positive impact on students' lives after education, it is necessary to identify the misconceptions about accounting education and to eliminate this misconception.

In many studies conducted to date, technology in accounting education (Morris et al., 2016), (Helfaya, 2019), curriculum in accounting education (Yüksel & Kayalı, 2021), learning approaches in accounting education (Effah et al., 2021), student profile in accounting education (Şenol & Tüfekçi 2007), expectations from accounting education (Akpınar & Çevik 2021), etc., there are many studies. However, it is seen that studies on misconception in accounting education are quite limited. In the study of Demirel Utku and Erol (2015), in which they focused on the misconceptions that occurred in the financial accounting course, it was observed that the students were faced with misconceptions in subjects such as account transactions and accounting logic. Yıldız and Ülkü (2017) in their study on misconceptions in accounting education; They stated that since the expressions used by students in daily life are similar in accounting education, they cause misinterpretation when using them in accounting education. As an example, they stated that expressions such as debt - credit, buyers - sellers are very confused. Akpınar and Yıldız (2018) tried to identify the metaphors for accounting perceptions of students taking accounting education. According to the authors, students see accounting as a difficult, boring and complex course. The results obtained in the study by Ay and Altın (2019) in which they analyzed the misconceptions of 4th grade students in the Department of Business Administration at Karamanoğlu Mehmetbey University in accounting education are similar to the studies of Yıldız and Ülkü (2017). Ay et al., (2020) in their study investigating misconceptions in accounting education, stated that 45% of students have misconceptions. According to the authors, this misconception complicates the understanding of accounting courses. Hiçyorulmaz and Akdoğan (2023) analyzed the misconceptions of students studying accounting at public and foundation universities. According to the results obtained; it was stated that the misconception levels of students in accounting education were the same and there was no relationship between demographic characteristics and accounting misconceptions. The limited number of studies on the related field in the aforementioned literature is the most important reason for the preference of this subject. This study is important in terms of identifying students' misconceptions about accounting education and suggesting solutions in order to put accounting education on solid foundations. The aim of the study is to identify the misconceptions of students about accounting education and to try to prevent these misconceptions by meeting with the relevant stakeholders. The study only expresses the misconceptions of students studying accounting in TRB 1 region. In this

respect, in order to make a general assessment, it is important to draw attention to the importance of the subject by making misconception analyzes of students studying accounting in different provinces and regions in future studies.

1.1. Purpose and Importance of the Research

The aim of this study is to determine the misconceptions that arise in accounting education and to determine whether the misconception levels of accounting students show a significant difference according to demographic characteristics. When both international and national studies on misconceptions in accounting education are examined in the literature, it is seen that the studies conducted in this field are insufficient. Misconceptions in accounting education cause students to perceive the course as difficult and make it difficult to understand the course. In addition, misconceptions in accounting education cause students to develop prejudice towards the course and negatively affect student achievement. For this reason, it is thought that studies should be carried out to prevent these misconceptions. This study is important in terms of determining students' misconceptions about accounting education and suggesting solutions in order to put accounting education on a healthy basis. This study, which focuses on misconceptions in accounting education, is important in terms of targeting the correct understanding of accounting, considering that all accounting courses are a chain, since the subject in one course will affect the other. In addition, it is important in terms of determining what is misexplained or misunderstood in the accounting education given in the future, making corrections and increasing the quality of students receiving accounting education.

1.2. Limitations of the Research

As the most important limitation of the study, it can be said that the data were collected only from the departments of business administration, business administration and accounting/tax practices, which provide the most accounting education. The reason for collecting data only from these departments is that they can give more opinions about accounting education since they have more accounting courses compared to other departments in faculties and colleges. In addition, the data were collected from the students who continue their education in the departments of business administration, business administration and accounting/tax practices of public universities in TRB 1 provinces, not throughout the country. Therefore, the limited sample limits the generalizability of the study. The results of this study are limited to the period between 24 March 2022 and 5 May 2022, the period in which the research was conducted. The reason why the study was conducted in this time interval is that the ethics committee approval was obtained on 24 March, and the data collection started on this date. In addition, the time interval before the end of the semester courses, when the students were at school intensively, was taken into consideration. For this reason, the research data were completed between 24 March and 5 May.

1.3. The Hypotheses of the Research

The hypotheses created for the purpose of the study are as follows:

H_1: The misconceptions of accounting education students about accounting education show a statistically significant difference according to age.

H_2: The misconceptions of the students who receive accounting education about accounting education show a statistically significant difference according to the department.

H_3: The misconceptions of the students who receive accounting education about accounting education show a statistically significant difference according to the class.

H_4: The misconceptions of students who receive accounting education about accounting education show a statistically significant difference according to their desire to work in the accounting profession.

H_5: The misconceptions of accounting education students about accounting education show a statistically significant difference according to their liking for accounting.

H_6: The misconceptions of the students who receive accounting education about accounting education show a statistically significant difference according to the reason they like accounting.

2. METHODOLOGY

In the research, the survey method, which is one of the primary data collection methods, was used in order to overcome the constraints such as time, cost and feasibility in data collection. Ethics committee approval for the study was obtained from the Fırat University Ethics Committee on March 24, 2022, with document number 06-13. The survey study consists of two parts. In the first part, there are 9 demographic questions for the participants. In the second part, there is the Misconception Analysis in Accounting Education (MAAE) Scale. Information about the scale is given below.

2.1. Misconception Analysis in Accounting Education (MAAE) Scale

In the study, the "Misconceptions Analysis in Accounting Education (MAAE) Scale" developed by Yılmaz (2022) was used to measure students' misconceptions in accounting education. The Cronbach Alpha reliability coefficient of the scale was calculated as 0.85. In the research, a 5-point Likert scale was used. The statements in the scale are (strongly disagree, disagree, neither agree nor disagree, agree, strongly agree). The MAAE scale consists of 28 items in 8 different dimensions.

In the study, normality analysis of the MAAE scale was performed. The results related to the analysis are given in Table 1.

Table 1. Analysis of Normality

Scale	N	Skewness	Kurtisos
MAAE Scale General	332	-.079	-.309
General Accounting Misconception	332	-.996	.691
Misconception About the Relationship Between Accounting Courses and Sub-Disciplines (other courses)	332	.077	-.624
Misconception About Who Accounting Education is for	332	-.081	-.868
The Misconception that Accounting Courses are Directly Related to Mathematics	332	-.318	-.922
The Misconception that Accounting Lessons are Based on Memorization	332	-.010	-.970
Theory and Practice are Very Different Misconception	332	-.132	-.007
The Misconception that Accounting is for Tax	332	-.166	-.453
The Misconception that it is the Accounting Registration Process	332	-.975	.386

According to the results given in Table 1, it was determined that the kurtosis and skewness values for the scale and its sub-dimensions showed normal distribution, since the Skewness (S) and Kurtosis (K) values were between -2 and +2 (George and Mallery, 2010). As the data showed a normal distribution, parametric tests were preferred in the study. In the study, the analysis of the data was made with the SPSS-22 program. In the analysis of the data, descriptive statistics, factor analysis, reliability analysis, and One-way analysis of variance analysis methods were used.

In Table 2, the explanatory factor analysis and reliability analysis for the MAAE scale is given.

According to the factor analysis findings for the MAAE scale in Table 2, the KMO value was realized as .774. This data shows that the sample size is sufficient to be able to perform factor analysis on the scale. Factor loads vary between .516 and .913. The total variance, on the other hand, was calculated as 71,726. As a result, the factor analysis findings for the MAAE scale support the factor structure and validity of the scale in question (Büyüköztürk, 2012p. 169).

In the study, Cronbach's Alpha Reliability Coefficient was used in the evaluation of the reliability of the scale and its sub-dimensions.. When Table 2 is examined, it is seen that the scale and its sub-dimensions have medium and high reliability. (Kılıç, 2016p. 48; Düşükcan et al, 2019p. 437).

Table 2. Factor and Reliability Analysis

Factor	Substances	Factor Loads 1	2	3	4	5	6	7	8	Explained Variance	Cronbach's Alpha
General Accounting Misconception	s2	.823								24.256	.834
	s1	.827									
	s3	.765									
	s5	.690									
	s4	.564									
Misconception About the Relationship Between Accounting Courses and Sub-Disciplines (Other Courses)	s6		.831							12.571	.774
	s7		.800								
Misconception About Who Accounting Education is for	s10			.841						10.237	.812
	s8			.777							
	s9			.742							
	s11			.562							
The Misconception that Accounting Courses are Directly Related to Mathematics	s12				.913					6.206	.867
	s13				.838						
The Misconception that Accounting Lessons are Based on Memorization	s16					.856				5.794	.854
	s15					.793					
	s14					.792					
	s17					.776					
Theory and Practice are Very Different Misconception	s21						.849			4.629	.773
	s19						.729				
	s18						.646				
	s22						.583				
	s20						.516				
The Misconception that Accounting is for Tax	s25							.828		4.516	.853
	s26							.820			
	s24							.811			
	s23							.650			
The Misconception that it is the Accounting Registration Process	s28								.750	3.517	.791
	s27								.552		
Overall										71.726	.879
KMO: .774; Bartlett K. T.: Chi-square: 5152.978 df: 378; p: .000											

2.2. Participants

The research population was determined as the students who continue their education in the departments of business administration, business management and accounting/tax practices of state universities in TRB 1 (Elazığ, Malatya, Tunceli and Bingöl) provinces in the 2021-2022 academic year. The reason why these departments are preferred is that the variety of accounting courses in the curriculum is higher than other departments. Yılmaz (2022) conducted the MAAE scale on 38 universities in his study. Since TRB 1 region universities were not included among these universities, TRB 1 region universities were preferred as the study population. The fact that this region was chosen as the study population is important in terms of the fact that a study on misconceptions in accounting education will be applied to this region for the first time and contributes to the generalisability of the research results. According to the Higher Education Institution YÖK Atlas Application data (yokatlas, 2022); it was determined that there are 2,073 students enrolled in the departments of business administration, business management and accounting/tax practices of state universities in the TRB 1 region provinces (Elazığ, Malatya, Tunceli and Bingöl) in the 2021-2022 academic year. The study was conducted on this population.

In order to determine the most appropriate sample size for the purposes of the study, Cochran Formula was used, where n is the sample size, N is the volume of the universe, t is the table value of the reliability level, p and q are the probability of occurrence and non-occurrence of the event of interest, and d is the sensitivity level (Hayran, 2012):

In order to determine the most suitable sample size for the purposes of the study; n is sample size; N is the volume of the universe; Cochran Formula was used, where t is the table value of the reliability level, p and q are the probability of occurrence and absence of the event of interest, and d is the sensitivity level (Hayran, 2012):

Sample Size

$n = N.(t2.p.q) / (d2.(N-1) + (t2.p.q)$

When the population size (N) is taken as 2073, the sample size should be at least (n) 324 according to the above formula, also known as Cochran Formula. It can be said that a sample of this size will have the power to represent the universe at 95% confidence level. The study was conducted with the participation of 332 students. From Fırat University, 156 students (115 at associate degree level and 41 at undergraduate level) participated in the study. 94 students from Inonu University, 56 at associate degree level and 38 at undergraduate level, participated in the study. From Bingöl University, 52 students (39 at associate degree level and 13 at undergraduate level) participated. From Tunceli Munzur University, 30 students participated only at the associate degree level.

3. FINDINGS

Table 3 shows the demographic findings of the participants.

As seen in Table 3, 66% of the students who received accounting education were female and 34% were male. It was observed that the majority of the students were composed of participants between the ages of 21-24. 39.2% of the students continue their education in the accounting and tax applications program, 33.1% in the business administration program and 27.7% in the business department. 38.3% of the students are in the 1st grade, 56.3% in the 2nd grade, 3.9% in the 3rd grade and 1.5% in the 4th grade. A great majority of the students, such as 47.6%, think of working in the field of accounting. However, 25.6% of them are undecided and 26.8% of them do not have the idea of working in the field of accounting. It was observed that 42.7% of the students liked accounting, but 38.9% were undecided. A majority of the students, such as 49.7%, stated that they like accounting itself. As the first accounting course taken, the majority of the students stated that they took General Accounting / General Accounting I / General Accounting II courses. These results show that the students are mostly between the ages of 21-24, they like accounting and they are thinking of working in the field of accounting in the future.

Table 3. Demographic Findings

PARTICIPANT PROFILE		
Gender	**F**	**%**
Female	219	66.0
Male	113	34.0
Age	**F**	**%**
18-20	130	39.2
21-24	183	55.1
25-28	14	4.2
29and above	5	1.5
Department	**F**	**%**
Business	92	27.7
Accounting/Tax Applications	130	39.2
Business Management	110	33.1
Grade	**F**	**%**
1st Grade	127	38.3
2nd Grade	187	56.3
3rd Grade	13	3.9
4th Grade	5	1.5
Working in the Field of Accounting	**F**	**%**
I Never Think	29	8.7
I Don't Think	60	18.1
What I'm Thinking What I'm Not Thinking	85	25.6
I am Thinking	125	37.7
I'm Definitely Thinking	33	9.9
Interest in Accounting	**F**	**%**
I don't like at all	29	8.7
I do not like	32	9.6
What I Like What I Don't Like	129	38.9
I love	117	35.2
I love so much	25	7.5
The Reason to Love Accounting	**F**	**%**
The Accounting İtself	165	49.7
Lecturers in the Courses	34	10.2
Method of Teaching the Lessons	88	26.5
Other	45	13.6
First Accounting Lesson Taken	**F**	**%**
General Accounting / General Accounting I / General Accounting II	274	82.5
Accounting Introduction	43	13.0
Accounting / Accounting I / Accounting II	10	3.0
Introduction to Accounting Science	3	0.9
Introduction to Financial Accounting	2	0.6

Arithmetic means were taken into account in the evaluation of the scale mean scores. The criteria ranges taken into account in the evaluation are given below (Tekin, 2017).

Table 4. Scale Score Ranges

Scale Ranges	**Correspondence to the Scale**
$1.00 \leq \text{mean} \leq 1.80$	Strongly Disagree
$1.80 \leq \text{mean} \leq 2.60$	Disagree
$2.60 \leq \text{mean} \leq 3.40$	Neither Agree Nor Disagree
$3.40 \leq \text{mean} \leq 4.20$	Agree
$4.20 \leq \text{mean} \leq 5.00$	Strongly Agree

Table 5. Evaluation of Professional Accountants and Average of MAAE Scale Total and Sub-Dimension Scores

Scale	Mean	Sd.
General Accounting Misconception	3.65	.97
Misconception about the relationship between accounting courses and sub-disciplines (other courses)	2.91	1.16
Misconception about who accounting education is for	3.15	1.13
The Misconception that Accounting Courses are Directly Related to Mathematics	3.16	1.25
The Misconception that Accounting Lessons are Based on Memorization	2.88	1.15
Theory and Practice are Very Different Misconception	3.18	.89
The Misconception that Accounting is for Tax	3.11	1.02
The Misconception that it is the Accounting Registration Process	3.88	1.05
MAAE Scale General	3.24	.62

According to the evaluation of the students who received accounting education, the total mean score of the MAAE scale is 3.24±0.62. The mean scores for the sub-dimensions were 3.65±0.97 in the general accounting misconception, 2.91±1.16 in the sub-disciplines (other courses) misconception, and 3.15±1.13 in the misconception about who it was for. The misconception that it is directly related to mathematics a 3.16±1.25, the misconception that memorization is weighted 2.88±1.15, the theory and practice are very different 3.18±0.89, the misconception is that accounting is for tax 3.11±1.02 and the misconception that it is the accounting recording process is 3.88±1.05. These results show that the misconceptions of accounting education students about accounting education are at medium and high levels.

The results of the one-way analysis performed to determine whether the MAAE scale scores of the students receiving accounting education show a statistically significant difference according to the age variable are given in Table 6 with its sub-dimensions.

According to the analysis findings in Table 6, there was a statistically significant difference between the general MAAE scale misconception scores of the students who received accounting education according to age ($p<0.05$). On the other hand, no difference was found between the memorization-weighted misconception score. In line with this result, the H_1 hypothesis, which states that the misconceptions of accounting education students about accounting education differ in terms of age, was accepted.

When the average scores were examined, it was seen that the opinions of the students who received accounting education about the MAAE scale in general were higher than the students aged 29 and above (mean: 3.80; sd: 0.56) than the students in other age groups. It has been observed that the views of the misconception that it is the accounting recording process are higher for students between the ages of 21-24 (mean: 4.01; sd: 1.01) than for students in other age groups. It was observed that the misconceptions of all other sub-dimensions were more common in students aged 29 and over.

Table 6. Distribution of Accounting Educational Misconceptions and Sub-Dimension Scores of the Students taking Accounting Education by Age

Factor	Age	N	Mean	Sd.	F	p
MAAE Scale General	18-20	130	3.22	.62	9.627	.000
	21-24	183	3.30	.60		
	25-28	14	2.47	.42		
	29 and above	5	3.80	.56		
General Accounting Misconception	18-20	130	3.67	.98	3.442	.017
	21-24	183	3.71	.97		
	25-28	14	2.85	.91		
	29 and above	5	3.48	.10		
Misconception about the relationship between accounting courses and sub-disciplines (other courses)	18-20	130	2.93	1.01	8.352	.000
	21-24	183	2.97	1.22		
	25-28	14	1.57	.54		
	29 and above	5	4.00	1.36		
Misconception about who accounting education is for	18-20	130	3.04	1.12	6.553	.000
	21-24	183	3.29	1.09		
	25-28	14	2.08	.80		
	29 and above	5	3.90	1.50		
The Misconception that Accounting Courses are Directly Related to Mathematics	18-20	130	3.06	1.27	3.144	.025
	21-24	183	3.27	1.22		
	25-28	14	2.35	1.13		
	29 and above	5	3.80	1.64		
The Misconception that Accounting Lessons are Based on Memorization	18-20	130	3.02	1.16	1.963	.119
	21-24	183	2.83	1.16		
	25-28	14	2.30	.74		
	29 and above	5	2.95	.95		
Theory and Practice are Very Different Misconception	18-20	130	3.22	.82	3.285	.021
	21-24	183	3.15	.93		
	25-28	14	2.87	.64		
	29 and above	5	4.28	.98		
The Misconception that Accounting is for Tax	18-20	130	2.95	.98	7.451	.000
	21-24	183	3.25	1.03		
	25-28	14	2.35	.42		
	29 and above	5	4.30	.95		
The Misconception that it is the Accounting Registration Process	18-20	130	3.81	1.07	5.751	.001
	21-24	183	4.01	1.01		
	25-28	14	2.85	1.09		
	29 and above	5	3.70	.27		

$p<0.05$= Accept; $p>0.05$= Rejection

The results of the one-way analysis performed to determine whether the MAAE scale scores of the students receiving accounting education show a statistically significant difference according to the department variable are given in Table 7 with its sub-dimensions.

Table 7. Distribution of Accounting Educational Misconceptions and Sub-Dimension Scores by Departments of the Students who received Accounting Education

Factor	Department	N	Mean	Sd.	F	p
MAAE Scale General	Business	92	3.24	.61	5.614	.004
	Accounting and Tax Applications	130	3.35	.62		
	Business Administration	110	3.07	.61		
General Accounting Misconception	Business	92	3.77	.95	5.033	.007
	Accounting and Tax Applications	130	3.74	.93		
	Business Administration	110	3.38	1.02		
Misconception about the relationship between accounting courses and sub-disciplines (other courses)	Business	92	2.85	1.16	.288	.750
	Accounting and Tax Applications	130	2.96	1.22		
	Business Administration	110	2.91	1.09		
Misconception about who accounting education is for	Business	92	3.19	1.14	2.637	.073
	Accounting and Tax Applications	130	3.28	1.18		
	Business Administration	110	2.93	1.01		
The Misconception that Accounting Courses are Directly Related to Mathematics	Business	92	3.43	1.11	6.865	.001
	Accounting and Tax Applications	130	3.19	1.29		
	Business Administration	110	2.79	1.27		
The Misconception that Accounting Lessons are Based on Memorization	Business	92	2.95	1.21	1.021	.361
	Accounting and Tax Applications	130	2.77	1.15		
	Business Administration	110	2.96	1.07		
Theory and Practice are Very Different Misconception	Business	92	3.00	.82	10.815	.000
	Accounting and Tax Applications	130	3.46	.99		
	Business Administration	110	3.02	.70		
The Misconception that Accounting is for Tax	Business	92	3.00	.97	5.052	.007
	Accounting and Tax Applications	130	3.33	1.09		
	Business Administration	110	2.93	.91		
The Misconception that it is the Accounting Registration Process	Business	92	3.89	1.11	3.719	.025
	Accounting and Tax Applications	130	4.04	.93		
	Business Administration	110	3.65	1.12		

$p<0.05$= Accept; $p>0.05$= Rejection

According to the analysis findings in Table 7, a statistically significant difference was found between the general MAAE scale misconception scores of the students who received accounting education according to the department ($p<0.05$). On the other hand, no difference was found between the misconception of its relation with sub-disciplines (other courses), the misconception about who it is for, and the memorization-weighted misconception. In line with this result, the H_2 hypothesis, which states that the misconceptions of accounting education students about accounting education differ in terms of department, was accepted.

When the average scores are examined, it is seen that the misconceptions of the students who continue their education in the accounting and tax applications program (mean: 3.35; sd: 0.62) about the general MAAE scale are higher than the students who continue their education in other departments. It is seen that the general accounting misconception and the view that the students who continue their

education in the department of business administration are directly related to mathematics are higher than the students who continue their education in other programs/departments.

The results of the one-way analysis performed to determine whether the MAAE scale scores of the students receiving accounting education show a statistically significant difference according to the class variable are given in Table 8 with its sub-dimensions.

Table 8. Distribution of Accounting Education Misconceptions and Sub-Dimension Scores of the Students who received Accounting Education by Class

Factor	Grade	N	Mean	Sd.	F	p
MAAE Scale General	1nd Grade	127	3.10	.64	3.266	**.022**
	2nd Grade	187	3.33	.60		
	3nd Grade	13	3.23	.62		
	4nd Grade	5	3.35	.57		
General Accounting Misconception	1nd Grade	127	3.59	1.07	.529	.623
	2nd Grade	187	3.71	.91		
	3nd Grade	13	3.61	.73		
	4nd Grade	5	3.40	1.47		
Misconception about the relationship between accounting courses and sub-disciplines (other courses)	1nd Grade	127	2.85	1.20	.696	.592
	2nd Grade	187	2.92	1.15		
	3nd Grade	13	3.23	.90		
	4nd Grade	5	3.30	1.25		
Misconception about who accounting education is for	1nd Grade	127	3.03	1.16	1.452	.228
	2nd Grade	187	3.25	1.11		
	3nd Grade	13	2.82	1.06		
	4nd Grade	5	3.35	.60		
The Misconception that Accounting Courses are Directly Related to Mathematics	1nd Grade	127	2.88	1.33	4.562	.004
	2nd Grade	187	3.38	1.16		
	3nd Grade	13	2.88	1.29		
	4nd Grade	5	2.80	1.30		
The Misconception that Accounting Lessons are Based on Memorization	1nd Grade	127	2.89	1.21	.702	.551
	2nd Grade	187	2.85	1.10		
	3nd Grade	13	3.05	1.30		
	4nd Grade	5	3.55	.83		
Theory and Practice are Very Different Misconception	1nd Grade	127	2.99	.81	3.269	.022
	2nd Grade	187	3.30	.94		
	3nd Grade	13	3.35	.64		
	4nd Grade	5	3.28	.62		
The Misconception that Accounting is for Tax	1nd Grade	127	2.88	.94	3.765	.011
	2nd Grade	187	3.25	1.07		
	3nd Grade	13	3.05	.83		
	4nd Grade	5	3.60	.37		
The Misconception that it is the Accounting Registration Process	1nd Grade	127	3.70	1.23	3.117	.026
	2nd Grade	187	4.02	.90		
	3nd Grade	13	3.92	.81		
	4nd Grade	5	3.20	1.60		

$p<0.05$= Accept; $p>0.05$= Rejection

According to the analysis findings in Table 8, there was a statistically significant difference between the MAAE scale misconception scores of the students who received accounting education according to the grade ($p<0.05$). On the other hand, no difference was found between the general accounting misconception, the misconception of its relation with sub-disciplines (other courses), the misconception about who it is for, and the memorization-weighted misconception. In line with this result, the H_3 hypothesis, which states that the misconceptions of accounting education students about accounting education differ in terms of grade, was accepted.

When the average scores were examined, it was seen that the 4th grade students who received accounting education had higher views on the MAAE scale (mean: 3.35; sd: 0.57) than the students in other classes. It has been observed that the 2nd grade students' misconceptions that accounting is directly related to mathematics, and that their theory and practice are very different, are higher than the students in other classes.

The results of the one-way analysis performed to determine whether the MAAE scale scores of the students receiving accounting education show a statistically significant difference according to the variable of working in the field of accounting are given in Table 9 with its sub-dimensions.

The MAAE scale misconception scores of the students who received accounting education, according to their working status in the field of accounting ($p<0.05$). On the other hand, no difference was found between the misconception of its relation with sub-disciplines (other courses), the misconception that it is directly related to mathematics, and the memorization-weighted misconception. In line with this result, the H_4 hypothesis, which states that the misconceptions of accounting education students about accounting education differ in terms of working in the field of accounting, was accepted.

When the average scores are examined, it is seen that the opinions of the students who stated that they definitely want to work in the field of accounting (mean: 3.56; sd: 0.57) about the MAAE scale were higher than those who stated other statements about working in the field of accounting.

Table 9: Distribution of Accounting Educational Misconceptions and Sub-Dimensional Scores of the Students Taking Accounting Education by Working Status in the Field of Accounting

Factor	Working in the Field of Accounting	N	Mean	Sd.	F	p
MAAE Scale General	I Never Think	29	3.15	.64	5.513	**.001**
	I Don't Think	60	3.07	.62		
	What I'm Thinking What I'm Not Thinking	85	3.14	.73		
	I am Thinking	125	3.31	.51		
	I'm Definitely Thinking	33	3.56	.57		
General Accounting Misconception	I Never Think	29	3.53	.92	8.621	.000
	I Don't Think	60	3.39	.91		
	What I'm Thinking What I'm Not Thinking	85	3.34	1.12		
	I am Thinking	125	3.87	.88		
	I'm Definitely Thinking	33	4.24	.54		

(Table 9 Cont.)

Factor	Working in the Field of Accounting	N	Mean	Sd.	F	p
Misconception about the relationship between accounting courses and sub-disciplines (other courses)	I Never Think	29	2.84	1.52	1.069	.372
	I Don't Think	60	3.00	1.08		
	What I'm Thinking What I'm Not Thinking	85	2.95	1.06		
	I am Thinking	125	2.78	1.14		
	I'm Definitely Thinking	33	3.21	1.25		
Misconception about who accounting education is for	I Never Think	29	3.25	1.18	3.744	.005
	I Don't Think	60	3.13	1.05		
	What I'm Thinking What I'm Not Thinking	85	2.94	1.21		
	I am Thinking	125	3.11	1.04		
	I'm Definitely Thinking	33	3.81	1.15		
The Misconception that Accounting Courses are Directly Related to Mathematics	I Never Think	29	3.29	1.16	.829	.507
	I Don't Think	60	2.94	1.20		
	What I'm Thinking What I'm Not Thinking	85	3.10	1.22		
	I am Thinking	125	3.24	1.24		
	I'm Definitely Thinking	33	3.31	1.54		
The Misconception that Accounting Lessons are Based on Memorization	I Never Think	29	2.66	1.16	2.309	.058
	I Don't Think	60	2.81	1.14		
	What I'm Thinking What I'm Not Thinking	85	2.97	1.22		
	I am Thinking	125	3.03	1.06		
	I'm Definitely Thinking	33	2.42	1.23		
Theory and Practice are Very Different Misconception	I Never Think	29	3.10	.64	2.467	.045
	I Don't Think	60	2.96	.67		
	What I'm Thinking What I'm Not Thinking	85	3.17	.91		
	I am Thinking	125	3.23	.83		
	I'm Definitely Thinking	33	3.54	1.35		
The Misconception that Accounting is for Tax	I Never Think	29	3.00	.96	2.865	.023
	I Don't Think	60	2.80	.96		
	What I'm Thinking What I'm Not Thinking	85	3.15	.99		
	I am Thinking	125	3.16	.97		
	I'm Definitely Thinking	33	3.50	1.30		
The Misconception that it is the Accounting Registration Process	I Never Think	29	3.60	1.19	6.094	.000
	I Don't Think	60	3.75	.87		
	What I'm Thinking What I'm Not Thinking	85	3.58	1.11		
	I am Thinking	125	4.06	1.03		
	I'm Definitely Thinking	33	4.45	.82		

p<0.05= Accept; p>0.05= Rejection

The results of the one-way analysis performed to determine whether the MAAE scale scores of the students receiving accounting education show a statistically significant difference according to the variable of liking accounting are given in Table 10 with its sub-dimensions.

Table 10. Distribution of Accounting Educational Misconceptions and Sub-Dimension Scores of the Students who received Accounting Education by their Love for Accounting

Factor	Interest in Accounting	N	Mean	Sd.	F	p
MAAE Scale General	I don't like at all	29	3.09	.69	2.974	**.020**
	I do not like	32	3.16	.67		
	What I Like What I Don't Like	129	3.19	.59		
	I love	117	3.28	.58		
	I love so much	25	3.60	.75		

(Table 10 Cont.)

Factor	Interest in Accounting	N	Mean	Sd.	F	p
General Accounting Misconception	I don't like at all	29	3.28	1.23	9.060	.000
	I do not like	32	3.18	.78		
	What I Like What I Don't Like	129	3.51	.98		
	I love	117	3.89	.80		
	I love so much	25	4.32	1.01		
Misconception about the relationship between accounting courses and sub-disciplines (other courses)	I don't like at all	29	2.94	1.31	.019	.999
	I do not like	32	2.90	.94		
	What I Like What I Don't Like	129	2.91	1.07		
	I love	117	2.90	1.22		
	I love so much	25	2.96	1.47		
Misconception about who accounting education is for	I don't like at all	29	3.21	1.25	.063	.993
	I do not like	32	3.10	1.15		
	What I Like What I Don't Like	129	3.14	1.07		
	I love	117	3.18	1.05		
	I love so much	25	3.11	1.60		
The Misconception that Accounting Courses are Directly Related to Mathematics	I don't like at all	29	2.82	1.40	5.591	.000
	I do not like	32	3.68	.86		
	What I Like What I Don't Like	129	3.18	1.09		
	I love	117	2.91	1.35		
	I love so much	25	3.92	1.33		
The Misconception that Accounting Lessons are Based on Memorization	I don't like at all	29	3.03	1.24	.389	.816
	I do not like	32	2.72	1.22		
	What I Like What I Don't Like	129	2.87	1.07		
	I love	117	2.87	1.14		
	I love so much	25	3.04	1.44		
Theory and Practice are Very Different Misconception	I don't like at all	29	2.91	.86	1.903	.110
	I do not like	32	3.28	1.01		
	What I Like What I Don't Like	129	3.15	.87		
	I love	117	3.19	.87		
	I love so much	25	3.55	.81		
The Misconception that Accounting is for Tax	I don't like at all	29	2.96	.84	1.549	.188
	I do not like	32	3.03	.77		
	What I Like What I Don't Like	129	3.03	.96		
	I love	117	3.16	1.14		
	I love so much	25	3.54	1.10		
The Misconception that it is the Accounting Registration Process	I don't like at all	29	3.56	1.27	2.866	.023
	I do not like	32	3.87	1.15		
	What I Like What I Don't Like	129	3.79	1.08		
	I love	117	3.94	.96		
	I love so much	25	4.46	.72		

$p<0.05$= Accept; $p>0.05$= Rejection

According to the analysis findings in Table 10, a statistically significant difference was found between the MAAE scale general misconception scores of the students who received accounting education, according to their liking for accounting ($p<0.05$). In line with this result, the H_5 hypothesis, which states that the misconceptions of accounting education students about accounting education differ in terms of liking accounting, was accepted. When the average scores are examined, it is seen that the

misconceptions of the students who stated that I love accounting very much about the MAAE scale were higher than the students who stated other statements about the state of liking accounting.

Table 11. Distribution of Accounting Educational Misconceptions and Sub-Dimensional Scores of the Students who received Accounting Education by the Reason for Loving Accounting

Factor	The Reason to Love Accounting	N	Mean	Sd.	F	p
MAAE Scale General	The Accounting Itself	165	3.23	.68	2.382	.069
	Lecturers in the Courses	34	3.47	.60		
	Method of Teaching the Lessons	88	3.23	.51		
	Other	45	3.10	.60		
General Accounting Misconception	The Accounting Itself	165	3.68	1.01	.872	.456
	Lecturers in the Courses	34	3.86	.80		
	Method of Teaching the Lessons	88	3.58	.94		
	Other	45	3.55	1.03		
Misconception about the relationship between accounting courses and sub-disciplines (other courses)	The Accounting Itself	165	3.21	1.25	5.213	.002
	Lecturers in the Courses	34	3.11	.77		
	Method of Teaching the Lessons	88	2.63	1.05		
	Other	45	2.57	1.09		
Misconception about who accounting education is for	The Accounting Itself	165	3.29	1.11	2.994	.031
	Lecturers in the Courses	34	2.97	1.08		
	Method of Teaching the Lessons	88	3.16	1.09		
	Other	45	2.76	1.21		
The Misconception that Accounting Courses are Directly Related to Mathematics	The Accounting Itself	165	3.10	1.38	5.211	.002
	Lecturers in the Courses	34	3.95	.85		
	Method of Teaching the Lessons	88	3.07	1.02		
	Other	45	3.05	1.24		
The Misconception that Accounting Lessons are Based on Memorization	The Accounting Itself	165	2.83	1.19	3.159	.025
	Lecturers in the Courses	34	3.44	.94		
	Method of Teaching the Lessons	88	2.84	1.11		
	Other	45	2.73	1.14		
Theory and Practice are Very Different Misconception	The Accounting Itself	165	3.10	.94	2.077	.103
	Lecturers in the Courses	34	3.48	.82		
	Method of Teaching the Lessons	88	3.27	.82		
	Other	45	3.11	.82		
The Misconception that Accounting is for Tax	The Accounting Itself	165	3.09	1.14	.182	.909
	Lecturers in the Courses	34	3.14	.86		
	Method of Teaching the Lessons	88	3.09	.95		
	Other	45	3.21	.76		
The Misconception that it is the Accounting Registration Process	The Accounting Itself	165	3.74	1.14	4.176	.006
	Lecturers in the Courses	34	4.08	.96		
	Method of Teaching the Lessons	88	4.17	.83		
	Other	45	3.68	1.07		

$p<0.05$= Accept; $p>0.05$= Rejection

The results of the one-way analysis performed to determine whether the MAAE scale scores of the students receiving accounting education show a statistically significant difference according to the variable of the reason for liking accounting are given in Table 11 with its sub-dimensions.

According to the analysis findings in Table 11, there was no statistically significant difference between the MAAE scale general misconception scores of the students who received accounting education, according to the reason for liking accounting ($p>0.05$). In line with this result, the H_6 hypothesis, which states that the misconceptions of accounting education students about accounting education differ in terms of the reason for liking accounting, was rejected.

4. RESULTS, DISCUSSION AND RECOMMENDATIONS

Misconception in education is one of the most important issues that should be considered in meaningful and effective learning. This study, which deals with the misconceptions in accounting education, was carried out with 332 students studying accounting at public universities in Elazığ, Malatya, Tunceli and Bingöl, which are the provinces of TRB 1 region. In the light of the findings obtained in the research, the following conclusions were reached.

Among the factors in the MAAE scale of the students studying accounting, the highest misconception average of 3.88 is the perception that accounting is a registration process. The second highest misconception average of 3.65 belongs to the general accounting factor. According to the expressions in this factor, students; They perceive the general accounting course as a course in which general information about accounting will be given and they have the perception that the general accounting course should be given before the financial accounting course. (Yılmaz, 2022) drew attention to a similar result in his study.

A relationship was found between the age of the students and their misconceptions about accounting education. In this case, it was observed that students aged 29 and over had higher misconceptions. The highest misconception of the students in this age group belongs to the factor that accounting is for tax. According to the expressions in this factor, students; accounting has the perception that it produces information for the tax payable to the state. It has been observed that the students studying in the 4th class have the same perception. Albrecht and Sack (2001) stated in their study that students associate accounting with tax. The second highest misconception belongs to the factor that the theory and practice of accounting are very different. According to this factor, students have the misconception that the theoretical knowledge learned in accounting courses and accounting practices in business life are different from each other. Temelli (2018) also reached a similar conclusion in her study.

A relationship has been determined between the department that the students study and their misconceptions about accounting education. In this case, it was seen that the misconception perceptions of the students studying in the accounting and tax applications department at the associate degree level were higher. The highest misconception of the students studying in this department belongs to the factor of accounting registration process. At the same time, it belongs to the factor of accounting record keeping process, which is the highest misconception of students who want to work in the field of accounting after graduation. Likewise, when they evaluate the lessons they have taken as a whole, it is

seen that the highest misconception perception of the students who state that they love accounting very much belongs to the factor of accounting recording process. According to the expressions in this factor, students; In short, it is seen that accounting has the perception of being a recording process. Akpınar and Yıldız (2018) stated in their study that when people think of accounting, a prescriptive and boring concept usually comes to mind, and the reason for this is the thought and perception that accounting only imposes some duties and responsibilities on people who are interested in this profession, such as keeping book records and dealing with repetitive accounting transactions. The second highest perception of misconception belongs to the general accounting factor. According to this factor, students; perceives the general accounting course as a course in which general information about accounting will be given. Demir and Çam (2006) stated in their study that the most important reason for failure, according to students' opinions, is that the course is taught with the idea that they have basic accounting knowledge.

In this study, which was carried out using the MAAE scale, the following suggestions can be made in order to prevent misconceptions in accounting education and to make accounting education more effective:

The high rate of misconceptions regarding the general accounting factor suggests that there is a misconception arising from the name of this course. In this respect, as Gül and Aksu (2022) stated in their studies, a standard should be provided for course names that are taught under different names among universities but have similar contents.

In order to eliminate the misconception about the factor of accounting is the recording process, it is necessary to determine whether this perception arises from the way the lesson is taught or whether it is due to the work of the members of the profession.

It is thought that the factor that states that the theory and practice of accounting are different, causing high misconceptions on students, is due to the fact that accounting education includes practice-oriented knowledge. Especially during the internship period, students who meet the intense work tempo in accounting have this perception towards accounting. However, the student should be taught that accounting does not only consist of practice and that the application will be inadequate without theoretical knowledge.

It is thought that the factor indicating that accounting is directly related to mathematics causes misconceptions on students, due to the use of too many numbers and formulas in accounting. Accounting, of course, needs mathematics, numbers, calculations, and four operations. However, there is a logic that can be expressed verbally in the infrastructure and basis of accounting. Accounting operates on the basis of this logic. The numerical aspect of accounting never takes precedence over the verbal aspect.

With this study, it was tried to determine the misconceptions of the students about accounting education. Concentrating on the causes of these misconceptions in future studies will undoubtedly contribute to increasing the quality of accounting education.

Ethics committee approval for the study was obtained from the Fırat University Ethics Committee on March 24, 2022, with document number 06-13.

The study has been crafted in adherence to the principles of research and publication ethics.

The authors declare that there exists no financial conflict of interest involving any institution, organization, or individual(s) associated with the article.

The authors declare their contributions to the study as follows: the first author handled data collection, writing, reviewing, and editing; the second author focused on writing the original draft and conceptualization; and the third author carried out data analysis and contributed to writing the original draft.

REFERENCES

Akpınar, S. & Çevik, Z. (2021). *İşletme biliminden seçkin araştırmalar,* Duvar Yayınları.

Akpınar, S. & Yıldız Ş. (2018). Muhasebe eğitimi alan öğrencilerin muhasebe algılarına yönelik metaforlar. *Muhasebe ve Finansman Dergisi*, (77), 91-114. https://doi.org/10.25095/mufad.401312

Albrecht, W. S. & Sack R. J. (2001). The perilous future of the accounting education. *The CPA Journal*, *71*(3), 16-23.

Ay, M. & Altın, Ü. (2019). Misconceptions in accounting education. *Journal of Human Sciences*, *16*(4), 938–960. https://doi.org/10.14687/jhs.v16i4.5710

Ay, M. (2011). Conceptual frameworks of university students regarding accounting. *African Journal of Business Management, 5*(5), 1570-1577.

Ay, M. Altın, M. & Altın, Ü. (2020). Muhasebe eğitiminde oluşan kavram yanılgılarının geliştirilen dört aşamalı tanı testi ile belirlenmesine yönelik bir araştırma. *Akademik Sosyal Araştırmalar Dergisi*, 8(108), 491-511.

Büyüköztürk, Ş. (2012), *Sosyal bilimler için veri analizi el kitabı*. Pegem Akademi.

Demir, M. & Çam, M. (2006). Muhasebe bölümü öğrencilerinin muhasebe öğreniminde başarılarını olumsuz etkileyen faktörlere ilişkin bir araştırma. *Muhasebe Finansman Dergisi,* 1–11.

Demirel Utku, B. & Erol, İ. (2015). Examination of the misconceptions that occur in students in Financial Accounting course. *International Journal of Social Sciences and Education Research*, *1*(4), 1078-1088. https://doi.org/10.24289/ijsser.279119

Düşükcan, M., Sezgin E. E. & Kaya, E. (2019). Elazığ 112 Acil Sağlık Hizmetleri istasyonlarında görev yapan sağlık çalışanlarında iş streslerinin işten ayrılma niyetine etkisi. *Journal of Academic Value Studies, 5*(3), 433-442.

Effah, N A. Otchere, O A. & Owusu, B. (2021). Learning approaches and styles in accounting education: A literature review. *IUP Journal of Accounting Research & Audit Practices; Hyderabad*, *20*(2), 7-26.

George, D. & Mallery, M. (2010). *SPSS for Windows step by step: A simple guide and reference* (17.0 update). Pearson.

Gül, M. & Aksu, İ. (2022). Analysis of accounting education at the world's leading universities and its comparison with Turkish universities. *Muhasebe ve Finansman Dergisi,* (94), 207-222. https://doi.org/10.25095/mufad.1018617

Hayran, O. (2012). *Sağlık bilimlerinde araştırma ve istatistik yöntemler.* Nobel Tıp Kitabevleri.

Helfaya, A. (2019). Assessing the use of computer-based assessment-feedback in teaching digital accountants. *Accounting Education, 28*(1), 69–99. https://doi.org/10.1080/09639284.2018.1501716

Hiçyorulmaz, E., & Akdoğan, H. (2023). Muhasebe eğitiminde yanılgıların araştırılması: üniversite öğrencileri üzerinde bir karşılaştırma. *Fiscaoeconomia, 7*(3), 1887-1906. https://doi.org/10.25295/fsecon.1274543

Kılıç, S. (2016). Cronbachs alpha reliability coefficient. *Journal of Mood Disorders, 6*(1), 47-48.

Morris, M., Burnett, R., Skousen, C. & Akaaboune, O. (2016). Accounting education and technology: A survey of long-term effects. *Journal of Accounting Educators*, (25).

Şenol, H. & Tüfekçi, Ö. K. (2007). Muhasebe programında eğitim gören öğrencilerin profili ve beklentileri: SDÜ Örneği. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (5), 151-163.

Tekin, H. (2017). *Eğitimde ölçme ve değerlendirme*. Yargı Yayınevi.

Temelli, F. (2018). Difficulties in understanding accounting courses and ıts reasons: a research for Agri Ibrahim Çeçen University Faculty of Economics and Administrative Sciences-department of business administration students. *Gümüşhane University Electronic Journal of The Institute of Social Sciences, 9*(22), 319–334.

Yıldız, Ş. & Ülkü, S. (2017). Muhasebe eğitiminde kavram yanılgıları ve kavram yanılgılarının önlenmesinde kavram haritalarının kullanımı. *Muhasebe ve Denetime Bakış*, *16*(50), 115-140.

Yılmaz, H.(2022a). *Muhasebe eğitiminde yanılgıların analizi: ölçek geliştirme çalışması* [Unpublished doctoral dissertation]. Selçuk Üniversitesi.

Yılmaz, H. (2022b). *Muhasebe eğitiminde yanılgılar: Çözüm odaklı bakış*. Akademisyen Kitabevi.

yokatlas, (2021, September 2). *Yükseköğretim program atlası*. https://yokatlas.yok.gov.tr/

Yüksel, F. & Kayalı, N. (2021). Muhasebe eğitiminde müfredatlarının oluşturulması ve değiştirilmesine etki eden faktörler: Türkiye yükseköğretim kurumları örneği. *Journal of Accounting and Taxation Studies*, *14*(1), 161-188. https://doi.org/10.29067/muvu.737353