

EXAMINATION OF THE SATISFACTION OF ACCOUNTING STUDENTS IN COVID-19 PROCESS ACCORDING TO THEIR EDUCATION TYPES AND LEARNING STYLES

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Summary

This study examines the relationship between the way of teaching and learning styles of students taking accounting courses during the Covid-19 pandemic and their satisfaction levels with accounting courses. In addition, possible changes due to socio-demographic differences among students were also tested. The population of the study consists of 300 students taking face-to-face, online and hybrid (both online and face-to-face) accounting courses at Aksaray University Faculty of Economics and Administrative Sciences in the spring semester of 2021-2022 academic year. The sample of the research, which was formed by convenience sampling method, consists of 211 students and the data were collected through face-to-face and online surveys. While creating the questionnaire form, scales that have been previously tested for validity and reliability and generally accepted in the literature were used. Cronbach's alpha value was used to measure the internal consistency of the scales used within the scope of the research, and it was determined that the alpha values of both scales were higher than the recommended value of 0.70. After the reliability test, Kolmogorov-Smirnov normality test was performed on the data and it was concluded that the data were suitable for parametric analyses. Subsequently, independent sample T-test and one-way ANOVA test were performed for hypothesis testing. The findings showed that there was a statistically significant difference between the training methods and accounting course satisfaction. The reason for this was found to be that students using kinesthetic learning style were less satisfied with online education.

Keywords: Types of Education, Accounting Education, Covid-19

JEL Codes: M49

INTRODUCTION

In today's world, studies on expectations from education and increasing efficiency continue rapidly. The development of the Internet and technology has carried distance education, which started with letters, to different points, and academic studies have been carried out on its efficiency. With the Covid-19 pandemic, distance education, which offers cost and logistical advantages with the interruption of formal education in the world, has been used compulsorily and its use continues in various forms and rates.

In accounting education, various searches continue due to professional expectations and the fact that it is one of the courses that students have difficulty in, and accounting education symposiums are held in order to increase this development / efficiency. When these symposiums and academic studies are examined, it is observed that there are different derivatives of subjects such as distance education and efficiency. The reason for this can be considered as the fact that the correct answers to the questions asked in accounting courses in various institutions and general exams are relatively lower than other courses, along with the expectations of the members of the profession.

There are many studies in the literature on satisfaction and the use of technology in accounting education. One of the important deficiencies in the literature is the learning style that people predominantly use and the provision of appropriate training. In order to design these trainings appropriately, the learning styles that students predominantly use should be determined. Then, they should be divided into groups according to these styles, and it can be thought that it would be useful to provide training with appropriate documents.

Based on this deficiency in the literature, this study aims to determine which educational style is predominantly used by students and to determine the relationship/direction of this relationship with their satisfaction with online education / face-to-face education. In addition to determining the relationships, possible demographic differences of students and differences in satisfaction levels are also examined as the sub-hypothesis of the research. These differences are sub-variables such as class, department, online / face-to-face education type and gender in accordance with the research population / sample.

Considering the results, since the students who predominantly use the visual learning style have a high average level of satisfaction with online education, identifying these students and increasing their online education rates can contribute to productivity. In order to increase the efficiency of students who predominantly use the kinesthetic learning style and 4th grade students, it may be useful to increase the face-to-face education rates.

1.1.Accounting Training-Satisfaction

Although the main purpose of education is defined as providing knowledge, skills and success in the long term, one of the main factors in the efficiency of this development is satisfaction (Caza, Brower, & Wayne, 2015) . While satisfaction with education motivates students at the point of study, it may cause loss of motivation in opposite situations (Atabay, 2022) .

Bryant and Bodfish (2014) (Bryant & Bodfish, 2014) concluded that there is a proportional relationship between satisfaction and graduation in their study on student satisfaction. The use of various new technologies in accounting education has been suggested. Stone et al. (2014) (Stone, Fiedler, & Kandunias, 2014) emphasised that the use of social platforms such as facebook would be more effective than traditional methods.

With the Covid 19 pandemic, formal education was cancelled in most of the world and the use of technology recommended in the literature started to be used compulsorily for education (Atabay, 2022) .

1.2. Distance Education

Distance education emerged as a concept in the 1700s and has a long history. In Turkey, it started to be applied in secondary education in the 1970s, albeit limited, and became widespread at all levels with the application of Anadolu University after 1980 (Süklüm, 2021) . Distance education is defined as a form of education carried out in various ways without the student and the instructor being in the same classroom environment. In the process that first emerged with the letter, it has gained difference with the development of technology and has better opportunities especially with the widespread use of web system / smart phones and applications.

1.3. Learning Styles

Learning styles are mainly classified as visual, auditory and kinesthetic (tactile-applied) in the literature. There are also sources that diversify these as subsystems (Boydak, 2015) .

Those who predominantly use visual learning style remember visual objects better while learning and shape them in their memory. These people encode information visually and encode it better than verbal data. They have difficulty in encoding information that is not supported by verbal or visual material (Veznedaroğlu, 2005) .

Those who predominantly use auditory learning style prefer, remember and encode the messages of verbal stimuli in their brains more. These people have difficulty in encoding visual and applied parts in their brains (Veznedaroğlu, 2005) .

Those who predominantly use the kinesthetic learning style prefer to experience life by touching and applying by being mobile in their social lives. They do the coding in their brains mainly with the experiences they touch and apply (Boydak, 2015) .

1.4. Literature Review

Atabay (2022) examined accounting education through distance education and found that self-motivation and self-efficacy are effective in the level of satisfaction in distance education.

Serçemeli and Kurnaz (2020) examined the perspectives of students on distance accounting education in the covid 19 period. They found that students did not internalise distance education (Serçemeli & Kurnaz, 2020).

Bircan et al. (2018) aimed to determine their interest in distance education courses and their desire to continue. In this study, it was found that perspectives did not differ in terms of gender.

In his study, Pellas (2014) claimed that the level of activism in distance learning can be affected by personal factors and that students who take courses through distance education will be less interested in the courses.

2. RESEARCH

2.1 Purpose of the Study

The research examines the relationship between the way of teaching and learning styles of students taking accounting courses during the Covid-19 pandemic and their satisfaction levels with accounting courses.

2.2. Population of the Study

The population of the study consists of 300 students taking face-to-face and online accounting courses at Aksaray University Faculty of Economics and Administrative Sciences in the spring semester of 2021-2022 academic year.

Face-to-face education is the form of education in which the instructor and the student are present in the classical classroom. Online education is a form of education in which the lecturer gives a lecture in front of a computer and a camera with an internet connection, and students can ask questions online (simultaneously) or watch the lecture later.

2.3. Sample of the Study

The research consists of 211 students who participated in the study on a voluntary basis by random convenience sampling method and the data were collected through face-to-face and online surveys. While creating the questionnaire form, scales whose validity and reliability have been previously tested and generally accepted in the literature were utilised.

2.4. Limitations of the Study

The research is limited to the data collected from 300 students who took face-to-face and online accounting courses in the spring semester of 2021-2022 academic year at Aksaray University Faculty of Economics and Administrative Sciences and from the students who received education from the same instructor. It is possible that different results may be obtained in researches to be conducted with students and lecturers studying at different universities and in periods outside these limits.

2.5. Methodology of the Research

In the research, a quantitative approach was determined and the data were collected on a voluntary basis with the help of a questionnaire, which is a fully structured interview technique. In the questionnaire, scales proven in terms of validity and reliability in the literature and primary data were used as scales. As other demographic variables, there are questions asking about gender, department, class and education type. The data were tested with the Spss 22 programme and the data were observed to be parametric and the necessary analyses were made and interpreted.

2.6. Hypotheses of the Research

The following hypotheses were developed in accordance with the purpose and method of the research.

H1: There is a significant relationship between accounting course satisfaction and gender status.

H2: There is a significant relationship between accounting course satisfaction and departments.

H3: There is a significant relationship between accounting course satisfaction and grades.

H4: There is a significant relationship between accounting course satisfaction and education system.

H5: There is a significant relationship between learning styles and accounting course satisfaction.

2.7. Findings of the Research

The demographic differences of the data collected for the research are as follows in the numbers and percentage expressions in the table.

Table 1. Demographic Variables

Gender	Number (N)	Percentage (%)	Sections	Number (N)	Percentage (%)
Woman	120	54,3	Business	51	23,1
Male	101	45,7	Economics	45	20,4
Total	221	100,0	Finance	93	42,1

Classes	Number (N)	Percentage (%)	Public Administration	32	14,5
1	9	4,1	Total	221	100,0
2	37	16,7	Type of Education	Number (N)	Percentage (%)
3	98	44,3	Online	105	47,5
4	77	34,8	Face to Face	116	52,5
Total	221	100,0	Total	221	100,0

To summarise Table 1 briefly, 120 of the students who participated in the study were female, accounting for 54.3% of all data, and 101 of the participants were male, accounting for 45.7% of the data.

In terms of the departments of the students participating in the research, 51 of the participants are in the department of business administration and constitute 23.1% of all data, 45 of the participants are in the department of economics and constitute 20.4% of the data, 93 of the participants are in the department of finance and constitute 42.1% of the data, 32 of the participants are in the department of public administration and constitute 14.5% of the data.

In terms of the grades of the students participating in the study, 9 of the participants were 1st grade and accounted for 4.1% of all data, 37 of the participants were 2nd grade and accounted for 16.7% of the data, 98 of the participants were 3rd grade and accounted for 44.3% of the data, 77 of the participants were 4th grade and accounted for 34.8% of the data.

In terms of the type of education of the students participating in the research, 105 of them received online education and constituted 47.5% of all data, 116 of the participants received online education and constituted 52.5% of the data.

The reliability levels of the scales used in the research are ;

Analyses were conducted to measure the reliability of the accounting course satisfaction scale.

Table 2. Accounting Course Satisfaction Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
,772	10

As can be seen in Table 2 above, the reliability rate of the scale is 77.2%, which is above 70% accepted in social sciences.

Reliability test of the scale used to measure learning styles was performed.

Table 3. Reliability analysis of Learning Styles

Reliability Statistics	
Cronbach's Alpha	N of Items
,827	3

As can be seen in Table 3 above, the reliability rate of the scale is 82.7%, which is above 70% accepted in social sciences.

2.8. Data Analysis

Kolmogorov-Smirnov and Shapiro-Wilk tests, known as normality tests, were performed to determine which of the parametric/nonparametric tests would be applied to the research data.

If the result of these tests is between -2 and +2, it can be accepted as normal distribution and parametric tests are applied (George & Mallery, 2010) .

As can be seen in Table 4 below, the test results of the answers given to the scale used to determine the satisfaction with the accounting course are within the limits suitable for parametric tests.

Table 4. Accounting Course Satisfaction Normality Test

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Satisfaction	,059	221	,057	,991	221	,222

a. Lilliefors Significance Correction

As can be seen in Table 5 below, the results of the test for the distribution of the normality of the responses of the learning styles are within the limits of normal distribution and are accepted as suitable for parametric tests.

Table 5. Learning Styles Normality Test

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Visual	,093	221	,000	,957	221	,000
Audio	,081	221	,001	,987	221	,034
Kinesthetic	,091	221	,000	,979	221	,002

a. Lilliefors Significance Correction

Independent sample T-test, Anova test and regression-correlation analyses required for the test of the research hypotheses were performed and the results were interpreted.

Table 6. Gender-Satisfaction and Learning Styles T-test

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Satisfaction	,590	,443	-2,624	219	,009	-,26751	,10193	-,46841	-,06661
			-2,654	218,603	,009	-,26751	,10080	-,46617	-,06885
Visual	,163	,687	3,320	219	,001	,28703	,08647	,11661	,45745
			3,342	217,093	,001	,28703	,08588	,11777	,45629
Audio	,525	,470	,660	219	,510	,06264	,09491	-,12442	,24970
			,667	218,602	,505	,06264	,09385	-,12233	,24761
Kinesthetic	,504	,479	,125	219	,901	,01099	,08818	-,16281	,18479
			,126	217,845	,900	,01099	,08743	-,16132	,18330

In order to test hypothesis H1, an independent sample T-test was conducted to determine whether there is a significant difference between satisfaction with accounting education and learning styles according to gender. As can be seen in Table 6, the sig values are greater than 0.05. As a result, H1 hypothesis is rejected. There is no significant relationship between accounting education and learning styles (visual, auditory, kinesthetic) according to gender.

Table 7. Anova Test Between Departments

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Satisfaction	Between Groups	3,115	3	1,038	1,794	,149
	Within Groups	125,604	217	,579		
	Total	128,719	220			
Visual	Between Groups	,200	3	,067	,154	,927
	Within Groups	94,115	217	,434		
	Total	94,315	220			
Auditory	Between Groups	1,082	3	,361	,729	,536
	Within Groups	107,323	217	,495		
	Total	108,405	220			
Kinesthetic	Between Groups	1,816	3	,605	1,434	,234
	Within Groups	91,589	217	,422		
	Total	93,405	220			

In order to test hypothesis H2, anova test was conducted to determine whether there is a difference between the departments of the participants and their satisfaction with accounting education and learning styles. As a result of this analysis, as can be seen in Table 7, the sig value is not below the value of 0,05, which is required for a significant relationship. This result shows that there is no significant relationship between the departments of the students and their satisfaction with accounting education and learning styles and H2 hypothesis is rejected.

Table 8. Difference Between Classes Anova Test

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Satisfaction	Between Groups	3,527	3	1,176	2,038	,110
	Within Groups	125,192	217	,577		
	Total	128,719	220			
Visual	Between Groups	2,845	3	,948	2,249	,084
	Within Groups	91,471	217	,422		
	Total	94,315	220			
<u>Auditory</u>	Between Groups	,722	3	,241	,485	,693

Within Groups		107,683	217	,496		
Total		108,405	220			
Kinesthetic	Between Groups	6,084	3	2,028	5,040	,002
	Within Groups	87,321	217	,402		
	Total	93,405	220			

In order to test hypothesis H3, anova test was conducted to determine whether there is a difference between the classes the participants studied and their satisfaction with accounting education and learning styles. As a result of this analysis, as can be seen in Table 8, the sig value is not below the value of 0.05, which is required for a significant relationship, except for kinesthetic learning. This result shows that there is no significant relationship between the grades of the students and their satisfaction with accounting education and between visual and auditory learning styles. A significant relationship is observed in the kinesthetic learning style. Tukey test results are needed to determine between which classes this relationship is different. Test results ;

As it is seen in Table 9 and emphasised with (*) sign, it is observed that the difference between the grades of the students who use kinesthetic learning style predominantly stems from the 3rd and 4th grades. The reason for this difference can be interpreted as the fact that the 4th grade students who use kinesthetic learning effectively want practice-based learning. H3 hypothesis is accepted.

Table 9. Detailed Tukey Test of the Difference in Kinesthetic Learning between Classes

Multiple Comparisons Tukey HSD						
Tukey HSD		Mean			Lower	Upper
	Classroom	Difference (I-J)	Std. Error	Sig.	Bound	Bound
1	2	-,06667	,23577	,992	-,6771	,5437
	3	-,10952	,22095	,960	-,6816	,4625
	4	,25281	,22347	,671	-,3258	,8314
2	1	,06667	,23577	,992	-,5437	,6771
	3	-,04286	,12240	,985	-,3598	,2740
	4	,31948	,12689	,060	-,0090	,6480
3	1	,10952	,22095	,960	-,4625	,6816
	2	,04286	,12240	,985	-,2740	,3598
	4	,36234*	,09660	,001	,1122	,6124
4	1	-,25281	,22347	,671	-,8314	,3258
	2	-,31948	,12689	,060	-,6480	,0090
	3	-,36234*	,09660	,001	-,6124	-,1122

In order to test hypothesis H4, an independent sample T-test was conducted to determine whether there is a significant difference between satisfaction with accounting education and learning styles according to the type of education. It is seen in Table 10 that auditory and kinaesthetic sig values are greater than 0,05. There is no significant relationship between learning styles (visual, auditory, kinesthetic) according to the type of education. There is a significant

difference in other satisfaction and learning styles. It is found that the average of online education and face-to-face education as the type of education is higher in terms of satisfaction with accounting education, and those who predominantly use visual learning style have higher satisfaction with online education. As a result, hypothesis H4 is accepted.

Table 10. T-test According to Education Type

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Satisfaction	,590	,443	-2,624	219	,009	-,26751	,10193	-,46841	-,06661
			-2,654	218,603	,009	-,26751	,10080	-,46617	-,06885
Visual	,163	,687	3,320	219	,001	,28703	,08647	,11661	,45745
			3,342	217,093	,001	,28703	,08588	,11777	,45629
Auditory	,525	,470	,660	219	,510	,06264	,09491	-,12442	,24970
			,667	218,602	,505	,06264	,09385	-,12233	,24761
Kinesthetic	,504	,479	,125	219	,901	,01099	,08818	-,16281	,18479
			,126	217,845	,900	,01099	,08743	-,16132	,18330

As can be seen in Table 11, the regression test result for the determination of the H5 hypothesis, which tests the relationship between the main hypothesis of the research, satisfaction with accounting education and the use of visual learning style predominantly, explains 1.3% of the regression test result.

Table 11. Relationship between Satisfaction and Visual Learning

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,115 ^a	,013	,009	,65193

a. Predictors: (Constant),

As can be seen in Table 12, the regression test result for the determination of the H5 hypothesis, which tests the relationship between the main hypothesis of the research, satisfaction with accounting education and the use of auditory learning style predominantly, explains 1.3% of the regression test result.

Table 12. Relationship between Satisfaction and Auditory Learning

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,138 ^a	,019	,015	,69681
a. Predictors: (Constant)				

As can be seen in Table 12, the regression test result for the determination of the H5 hypothesis, which tests the relationship between satisfaction with accounting education, which is the main hypothesis of the research, and the use of auditory learning style predominantly, explains 0.19%.

Table 13. Relationship between Satisfaction and Kinesthetic Learning

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,204 ^a	,42	,037	,63930
a. Predictors: (Constant)				

As can be seen in Table 13, the regression test result for the determination of the H5 hypothesis, which tests the relationship between the main hypothesis of the study, satisfaction with accounting education and the predominant use of kinesthetic learning style, explains 42% of the regression test result. This is the relationship that can be characterised as significant and the H5 hypothesis is accepted for this variable. Correlation analysis was performed to determine the magnitude and direction of this relationship and the results are shown in Table 14 below.

Table 14. Correlation Analysis between Satisfaction and Learning Styles

Correlations					
		Satisfaction	kinesthetic	visual	auditory
Satisfaction	Pearson Correlation	1	-,404**	-,115	-,138*
	Sig. (2-tailed)		,002	,089	,040
	N	221	221	221	221
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

The direction of this relationship has an inverse relationship of -40,4%. This rate, which was expected at the beginning of the research, shows that students who predominantly use the application learning style are not satisfied with online training. In order to explain the reason for dissatisfaction, it can be considered that qualitative research will be useful for future researchers and practice.

CONCLUSION AND RECOMMENDATIONS

As a result, it is possible that various searches in education will continue with the development of technology in the world. The reason for this is the desire to use resources more effectively and efficiently in education/accounting education as in all financial resources. In particular, the fact that students who are relatively prejudiced towards numerical courses have the same approach to accounting courses can be characterised as an important problem in terms of the efficiency of education. For this reason, researches are carried out in academia and practice for the quantitative and qualitative development of accounting students/professionals.

The determination of the current situation of the quality and efficiency of accounting education, its causes, results and solutions to the problems is a very important issue for accounting educators. For the solution of this problem, specific accounting education symposiums are organised and many researches are carried out by experts in academia and practice.

In the research, it is aimed to determine the relationships between distance / face-to-face education, which has been carried to different dimensions especially with technology and the internet, which has been implemented compulsorily with Covid19 and continues to be implemented in various ways, and the learning styles that students mainly use and their satisfaction levels with accounting education. For this purpose, data were collected with the help of scales whose validity and reliability have been tested/approved in the literature and a questionnaire, which is a fully structured interview technique, to students who have received education in various ways and use learning styles.

As a result of the research, it was concluded that there is a significant and inverse relationship between learning styles and satisfaction with accounting education established as the main hypothesis. The reason for this result is that students who predominantly use kinesthetic learning style are not satisfied with online education. It can be considered as an expected result, because those who predominantly use the kinesthetic learning style see activities such as touching and applying as necessary for learning. It is thought that it would be useful to investigate the reasons with qualitative research in terms of practice and theory.

In the sub-hypotheses, as the H3 hypothesis, it is revealed as a result of the anova test that 4th grade students are less satisfied with distance education than 3rd grade students. The reason for this can be interpreted as entering the psychology of graduation and feeling the need for practice.

In the analyses to determine the differences in terms of gender and the departments being studied, it is observed that there is no significant relationship. The reason for this can be interpreted as that the learning style that individuals use more than gender and department variables is more predominant.

One of the issues that should be discussed according to the results of the research is that, as revealed in the data, the students who predominantly use the kinesthetic learning style and the students who study in the last year and seek application are found to have low satisfaction levels with distance education compared to other groups. In this context, it can be considered that planning by taking these issues into consideration, especially for those who apply distance

education as an elective, will contribute to the increase in satisfaction and productivity in accounting education.

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