The Effect of Learning Behavior, Learning Motivation, Intelectual Intelligence (IQ) and Emotional Intelligence on Accounting Understanding

Niken Ayu Winitasari[1,] Banu Witono*[1]

[1] *Faculty of Economics and Business, Universitas Muhammadiyah Surakarta*
Corresponding author. Email: bw257@ums.ac.id

ABSTRACT

The objective of the study is to describe the relationship between learning behavior, learning motivation, intellectual intelligence, and emotional intelligence and accounting understanding with a sample of the students of the Accounting Department, School of Economics and Business, Universitas Muhammadiyah Surakarta UMS), Central Java Indonesia. The study used primary data. Data collection technique distributed the questionnaires to accounting students in the 2017-2019 academic year. The sample used 86 accounting students. The study applied quantitative data analysis with normality, the multicollinearity assumption test, heteroskedasticity test, multiple linear regression analysis, hypothesis testing, and coefficient of determination (R^2) test. The research results show that (1) learning behavior has no effect on accounting understanding, (2) learning motivation has an effect on accounting understanding, (3) intellectual intelligence has an effect on accounting understanding, and (4) emotional intelligence has no effect on accounting understanding.

Keywords: *Learning Behaviour, Learning Motivation, Intellectual Intelligence, Emotional Intelligence.*

1. INTRODUCTION

To improve people's quality and welfare, education is an essential sector. Education applied in one country becomes a determinant factor in the process of state-building. Thus, education equality will produce intelligent generations. The state needs to improve the quality and education system to produce qualified graduates so that its people's living standards and welfare increase [1]. Accounting education is an example. Accounting understanding level can be assessed by what extent a student understands what he has learned in higher education. In this context, the level refers to some courses such as Introduction to Accounting 1 & 2, Accounting Intermediate Finance 1 & 2, Advanced Financial Accounting, Cost Accounting, Management Accounting, Auditing 1 &2, and Accounting Theory. A higher education undeniably expects its students to understand accounting theories and concepts they have studied are competent in them by taking accounting course learning processes [2].

Accounting understanding aims to produce graduates who can apply accounting in their daily lives and become professional accountants. If students can understand accounting well, they can compete with other professional accountants nationally and internationally [3].

The first factor in influencing accounting understanding is learning behavior. Learning behavior means to take a learning activity routinely. Thus, the behavior will affect an individual's achievement [4]. Students' learning behavior closely relates to the spirit and attitude of how they learn. Good learning behavior consists of (1) taking a course routinely, (2) reading references and kinds of literature routinely, (3) visiting the library routinely, and (4) taking a test routinely [5].

The second factor affecting accounting understanding is learning motivation. Learning motivation is an individual's drive that causes him or her to take a course for a specific goal to be achieved [6]. Motivation will encourage the intensity of students' learning activities. If they have high motivation to study diligently, they will

be able to achieve maximum learning outcomes. Several indicators influencing learning motivation include 1) aspirations, 2) learning skills, 3) condition, 4) environment, 5) dynamic elements in learning, and 6) teacher's activities in teaching students [7].

Another factor influencing accounting understanding is intellectual intelligence. Intellectual intelligence is a person's ability to think and act purposefully and master the environment effectively [1]. The higher the intellectual intelligence a person has, the higher his or her ability increases in accounting understanding. Intellectual intelligence can be measured by several indicators such as 1) problem-solving ability, 2) verbal intelligence, and 3) practical intelligence [8].

The last factor affecting accounting understanding is emotional intelligence. Goleman said that we have two brains, thoughts, and types of emotional intelligence. Our success in life is determined by both intellectual intelligence and emotional intelligence. Emotional intelligence plays a role because intellectual intelligence does not work without emotional intelligence [9]. With emotional intelligence, a person can put his emotions in the right portions, sort out satisfaction, and regulate mood [10]. Emotional intelligence can help students understand accounting courses or subjects because students can understand their feelings well and other people's feelings effectively. According to Goleman, emotional intelligence (EQ) is categorized into several components, including (1) self-awareness, (2) self-regulation, (3) motivation, 4) empathy and 5) social skills.

The previous research results of accounting understanding have been carried out extensively. The research result by Suwi [11] shows intellectual intelligence, emotional intelligence, and learning behavior are positively influential on accounting understanding. It is relevant to research by Agung [12], showing that learning behavior and emotional intelligence have a positive influence on the level of accounting understanding. It is different from the research result by Herli [13], showing that emotional, intellectual, spiritual, and social intelligence have a positive influence on accounting understanding. However, emotional and spiritual intelligence and learning behavior do not significantly affect accounting understanding.

The research paper describes the influence of learning behavior, learning motivation, intellectual intelligence (IQ), and emotional intelligence (EQ) on Accounting Understanding.

2. METHOD

2.1 Type and Design of Research

The study used a quantitative approach. Quantitative research is a study of observations expressed in numbers [14]. It employed a causal relationship. It means there will be independent variables and dependent variables (variables affected) [14]. The variables of the study included learning behavior (X1), learning motivation (X2), emotional intelligence (X3), intellectual intelligence (X4), and accounting understanding (Y).

2.2 Research Object

The research objects were the students of the Accounting Department, School of Economics and Business, UMS. The respondents were accounting students who have taken an undergraduate education at UMS. The study used the primary data obtained from the questionnaires.

2.3 Data Collection Techniques

The data collection applied a survey method. The method is a primary data collection method by using verbal and written questions. It requires contact or relationship between researchers and research subjects (respondents) to obtain the necessary data [15]. Because the study was conducted during the pandemic time, the data were collected by distributing the questionnaires using the Google Form sent to the respondents. It used the Likert scale.

2.4 Data Analysis Techniques

The study employed quantitative data analysis methods with a classic test consisting of the normality, multicollinearity, assumption, heteroskedasticity, multiple linear regression analysis, hypothesis, and the coefficient of determination (R^2) test.

3. RESULTS AND DISCUSSION

3.1 Results

3.1.1 Characteristics of Respondents

The characteristics of respondents included demographic data (university origin, gender, and semester). The respondents were the students of the 2017-2019 Accounting Department of UMS.

Table 1

Characteristics of respondents

Universities	Number	Percentage
Universitas Muhammadiyah Surakarta	56	65%
Sebelas Maret University	11	33%
Slamet Riyadi University	2	2%

Tunas Pembangunan University	2	2%		
Raden Mas Said University	11	33%		
Islam Batik University of Surakarta	4	5%		
Total	**86**	**100%**		
Female	64	74%		
Male	22	26%		
Total	**86**	**100%**		
Semester 5	11	13%		
Semester 7	25	29%		
Semester 8	13	15%		
Semester 9	34	40%		
Semester 11	2	2%		
Semester 13	1	1%		
Total	**86**	**100%**		

Source: Primary data processed by SPSS.

3.1.2 Instrument Test

3.1.2.1 Validity Test

The purpose of the validity test is to test the level of validity of the questionnaire used in the study. The value rate for the validity test is a correlation coefficient with a higher value than the r-table value [16]. R-table value is based on the number of samples of 86 respondents. In the test, the validity of the sample is n = 86 with a significance level of 5% or $\alpha = 0.05$. Then, the highest r-table is 0.2096. Table 2 reports the validity test results.

Table 2

Validity Test

	Q1	0.354	0.2096	VALID
	Q2	0.565	0.2096	VALID
	Q3	0.735	0.2096	VALID
Learning behavior	Q4	0.804	0.2096	VALID
	Q5	0.854	0.2096	VALID
	Q6	0.741	0.2096	VALID
	Q7	0.523	0.2096	VALID
	Q1	0.643	0.2096	VALID
	Q2	0.720	0.2096	VALID
Learning motivation	Q3	0.654	0.2096	VALID
	Q4	0.751	0.2096	VALID
	Q5	0.774	0.2096	VALID
	Q6	0.732	0.2096	VALID

	Q7	0.692	0.2096	VALID
	Q1	0.648	0.2096	VALID
	Q2	0.481	0.2096	VALID
	Q3	0.742	0.2096	VALID
Intellectual intelligence	Q4	0.712	0.2096	VALID
	Q5	0.759	0.2096	VALID
	Q6	0.595	0.2096	VALID
	Q7	0.643	0.2096	VALID
	Q1	0.780	0.2096	VALID
	Q2	0.713	0.2096	VALID
	Q3	0.787	0.2096	VALID
Emotional intelligence	Q4	0.773	0.2096	VALID
	Q5	0.685	0.2096	VALID
	Q6	0.683	0.2096	VALID
	Q7	0.680	0.2096	VALID
	Q1	0.648	0.2096	VALID
	Q2	0.712	0.2096	VALID
	Q3	0.564	0.2096	VALID
	Q4	0.743	0.2096	VALID
Accounting understanding	Q5	0.738	0.2096	VALID
	Q6	0.720	0.2096	VALID
	Q7	0.674	0.2096	VALID
	Q8	0.766	0.2096	VALID
	Q9	0.799	0.2096	VALID
	Q10	0.742	0.2096	VALID

Source: Primary data processed by SPSS.

3.1.2.2 Reliability Test

Reliability is the accurate measurement instrument in the procedure [16]. The test of the data reliability used the Cronbach's Alpha method. A variable will be reliable if it gives a Cronbach Alpha value of > 0.60. Based on Table 2, each variable has Cronbach's Alpha higher than 0.60. Thus, it can be concluded that the variables in this study are reliable.

Table 3

Reliability Test

Variable	Cronbach's alpha	Sig	Description
Learning behavior	0.794	0.60	RELIABLE
Learning motivation	0.835	0.60	RELIABLE
Intellectual intelligence	0.783	0.60	RELIABLE
Emotional intelligence	0.850	0.60	RELIABLE
Accounting Understanding	0.892	0.60	RELIABLE

Source: Primary data processed by SPSS.

3.1.3 The Coefficient of Determination (R^2)

The coefficient of determination (R^2) is a value (the value of the proportion that measures what extent the ability of the independent variables used in the regression equation can explain the variation of the dependent variables [16]. The coefficient of determination ranges from 0 to 1.

Table 7

The coefficient of determination (R^2)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.970[a]	.940	.937	1.397

It is stated that the coefficient of determination is 0.937. It means that all the independent variables, including the students' learning behavior, learning motivation, intellectual and emotional intelligence simultaneously affect accounting understanding are 93.70%, and 6.3% are influenced by other factors.

3.1.4 Simultaneous Significance Tet (F Test)

The purpose of the F test is to test the effect of the independent variables (independent) together or simultaneously on the dependent variables [16].

Table 8

F test

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2480.833	4	620.208	318.016	.000[b]
	Residual	157.970	81	1.950		
	Total	2638.802	85			

a. Dependent Variable: Y

b. Predictors: (Constant), X4, X2, X1, X3

Table 8 reports the results of the Anova test or F test, F count 318.016 with a significance level of 0.000 less than 0.05. Therefore, all of the independent variables, including learning behavior, learning motivation, intellectual and emotional intelligence have a significant effect on accounting understanding.

3.1.5 Hypothesis Test (T-test)

T-test was conducted to determine whether each independent variable had a partial effect on the dependent variable. To find out whether each independent variable can affect the dependent variable, the following are the hypotheses proposed.

H0 is accepted if T count < t table, or the p-value in the sig column > level of significant

H0 is rejected if T count > t table, or the p-value in the column sig < level of significant

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-1.747	1.690		-1.034	.304
	X1	-.020	.039	-.016	-.503	.616
	X2	1.429	.040	.967	35.472	.000
	X3	.130	.051	.088	2.556	.012
	X4	-.036	.041	-.028	-.877	.383

a. Dependent Variable: Y

a. The variable of learning behavior (X1) has a probability of 0.616 > 0.05, so it is stated that H0 is accepted or confirmed and Ha is rejected. It means that it cannot be used as a determinant factor in accounting understanding.

b. The variable of learning motivation (X2) has a probability of 0.000 <0.05, so it is stated that H0 is rejected and Ha is accepted or confirmed. It means that it can be used as a determinant determining factor in accounting understanding.

c. The intelligence variable (X3) has a probability of 0.012 <0.05. It means that H0 is rejected and Ha is accepted, which means that it can be used as a determinant factor in accounting understanding.

d. The variable of emotional intelligence (X4) has a probability of 0.383 > 0.05, so it is stated that H0 is accepted and Ha is rejected. It means that it cannot be used as a determinant factor in accounting understanding.

3.2 DISCUSSION

3.2.1 The Effect of Learning Behaviour on Accounting Understanding

Multiple intelligence is a theory that distinguishes intelligence in specific from that intelligence in general, called *the g factor*. The education system in general is inclined to the application of linguistic models and assessments. up to a lower limit, towards logic-mathematical modalities as well [17]. Therefore, the difference in the students' learning behavior is due to multiple intelligence. Based on the results of the research, the first hypothesis test (H1) shows that learning behavior has a significance value of 0.616 > (0.05). It means that the learning behavior variable does not influence accounting understanding. It is relevant to the research result by Inriawati [18]. This is due to differences in the students' attitudes in learning; not all the students studied regularly and they were undisciplined. Besides that, not

all the students could understand the material well and they took their obstacles in learning so it affects the results of their test scores, used as an assessment of understanding accounting. This is different from the research result by Rusmiani [19], stating that learning behavior could affect the level of accounting understanding because positive learning behavior will lead to a higher intensity of activity than negative learning behavior.

3.2.2 The Effect of Learning Motivation on Accounting Understanding

The research result shows that learning motivation has a significance value of 0.000 < (0.05). It confirms the second hypothesis (H2), stating that learning motivation has a significant positive effect on the level of accounting understanding. It is relevant to the research by Aulia & Subowo [20] because motivation could encourage students to study seriously and they did not give up easily so they desired to develop knowledge. The students who have learning motivation have a positive impact on assignments and take the learning process well so that it will increase accounting understanding. However, the students with poor learning motivation will lack enthusiasm for learning. Therefore, it can disturb the students to concentrate on their tasks.

3.2.3 The Effect of Intellectual Intelligence on Accounting Understanding

Howard Gardner's theory states that all humans have different intelligence compounds. Everyone has a different intellectual profile [17]. The results showed that intellectual intelligence had a significance value of 0.012 < (0.05). It confirms the third hypothesis (H3), stating that intellectual intelligence has a significant positive effect on the level of accounting understanding. With good intellectual intelligence, students will find it easier to understand accounting understanding. Intellectual intelligence is the first intelligence development that can

make a student able to think rationally to study accounting and understand accounting. A student with good intellectual intelligence will be able to understand accounting more easily and be able to read, study, and understand accounting better and show his or her curiosity in accounting. The research results are in line with those by Asih & Achyani [21], stating that intellectual intelligence has a positive effect on the level of accounting understanding. In addition, it is confirmed by those by Kristianawati [22], showing that intellectual intelligence has a positive effect on accounting understanding.

3.2.4 The Effect of Emotional Intelligence on Accounting Understanding

The research results show that emotional intelligence has a significance value of $0.383 > (0.05)$. Based on the results of the fourth hypothesis test (H4), it can be stated that emotional intelligence has no significant effect on accounting understanding. The results are in line with those of Parauba [18]. This is because not all students have the ability to control their feelings and emotions or empathize and cooperate with others. Besides that, the students with poor emotional skills can make the students lack the motivation to learn and find it difficult to concentrate on learning so it can disturb their abilities to focus on the individual's tasks. The results study is different from those by Junifar & Kurnia [23], stating that emotional intelligence has positive results or has an effect on accounting understanding.

4. CONCLUSION

4.1 CONCLUSION

Based on the results of simultaneous tests with the F test, all the independent free variables, including the students' learning behavior, learning motivation, intellectual and emotional intelligence it has a significant effect on accounting understanding. However, that emotional intelligence does not affect accounting understanding.

4.2 SUGGESTION

Based on the research results, it is suggested as follows: (1) universities are expected to improve student's learning behavior by taking seminars and adhering to the discipline in the learning process. (2) Students are expected to be able to improve learning behavior by vising the library to read references and kinds of literature, working in groups to exchange ideas, increasing emotional intelligence, keeping motivated. (3) Students must be optimistic and eliminate the sense of laziness in practicing accounting so they can understand accounting better. (4) Future researchers can use samples unlimited to the variables of learning behavior, learning motivation, intellectual and emotional intelligence for investigating the accounting understanding level by

students of public or state universities (PTN) and private universities (PTS) in Surakarta.

AUTHORS' CONTRIBUTIONS

NAW participated in surveys and polls, analyzed data, and wrote the manuscript. BW participated in making the manuscript draft. Finally, all the authors agree with the research paper.

REFERENCES

[1]   D. P. Handayani, "PENGARUH KECERDASAN EMOSIONAL, KECERDASAN INTELEKTUAL, DAN MINAT BELAJAR TERHADAP TINGKAT PEMAHAMAN AKUNTANSI," *Skripsi*, p. FAKULTAS EKONOMI UNIVERSITAS SEMARANG, 2019.

[2]   E. W. Ramadhani and M. A. Aris, "Analisis Tingkat Pemahaman Mahasiswa Akuntansi Terhadap Konsep Dasar Akuntansi (Studi Empiris Pada Mahasiswa Akuntansi S1 Universitas Muhammadiyah Surakarta dan Universitas Negeri Sebelas Maret yang Berasal dari Latar Belakang Sekolah Menengah yang Berbed," *eprint.ums.ac.id*, 2017. .

[3]   A. Trinovryan, "Departement of Accounting, Faculty of Economic," pp. 2049–2063.

[4]   Hanifah and A. Syukriy, "Pengaruh Perilaku Belajar Terhadap Prestasi Akademik Mahasiswa Akuntansi," *Media Ris. Akuntansi, Audit. dan Informasi.*, vol. 1, pp. 63–86, 2001.

[5]   Suwardjono, "Perilaku Belajar di Perguruan Tinggi," *http://www.suwardjono.com*, 2004. .

[6]   F. Daud, "Pengaruh Kecerdasan Emosional (EQ) dan Motivasi Belajar Terhadap Hasil Belajar Biologi Siswa SMA 3 Negeri Kota Palopo," *J. Pendidik. Dan Pembelajaran*, vol. 19, 2012.

[7]   Dimyati and Moedjiono, *Belajar dan Perkembangan*. Jakarta: Rineka Cipta, 2002.

[8]   M. B. Artana, N. T. Herawati, and A. W. T. Atmadja, "Pengaruh Kecerdasan Intelektual (IQ), Kecerdasan Emosional (EQ), Kecerdasan Spiritual (SQ), dan Perliaku Belajar terhadap Pemahaman Akuntansi," *E-Journal S1 Akunt. Univ. Pendidik. Ganesha*, vol. 2, no. 1, pp. 1–11, 2014, [Online]. Available: https://ejournal.undiksha.ac.id/index.php/S1ak/article/view/4396.

[9]   A. R. Jayadi, "Pengaruh Kecerdasan Emosional Dan Perilaku Belajar Terhadap Pemahaman Akuntansi," *J. Chem. Inf. Model.*, vol. 53, no. 9, pp. 1689–1699, 2016.

[10] F. Rachmi, "PENGARUH KECERDASAN EMOSIONAL, KECERDASAN SPIRITUAL, DAN PERILAKU BELAJAR TERHADAP TINGKAT PEMAHAMAN AKUNTANSI," *Skripsi*, p. Fakultas Ekonomi Universitas Diponegoro Semarang, 2010.

[11] M. Suwi Novita Devi, I. K. Sujana, and I. W. Pradnyantha Wirasedana, "Pengaruh Perilaku Belajar, Kecerdasan Emosional dan Kecerdasan Adversitas pada Tingkat Pemahaman Akuntansi," *E-Jurnal Akunt.*, vol. 30, no. 4, p. 897, 2020, doi: 10.24843/eja.2020.v30.i04.p08.

[12] A. A. N. Agung Kresnandra, "Pengaruh Perilaku Belajar terhadap Tingkat Pemahaman Akuntansi dengan Kecerdasan Emosional sebagai Variabel Pemoderasi," *E-Jurnal Akunt.*, vol. 28, no. 3, p. 2065, 2019, doi: 10.24843/eja.2019.v28.i03.p27.

[13] F. Herli, Kamaliah, and A. Silvi, "PENGARUH KECERDASAN EMOSIONAL, KECERDASAN INTELEKTUAL, KECERDASAN SPRITUAL, DAN KECERDASAN SOSIAL TERHADAP PEMAHAMAN AKUNTANSI," *JOM FEKON*, vol. 1, 2014.

[14] Sugiyono, *Statistika Untuk Penelitian*. Bandung: Alfabeta, 2007.

[15] N. Indriantoro and B. Supomo, *Metode Penelitian Bisnis untuk Akuntansi dan Manajemen*. Yogyakarta: BPFE, 1999.

[16] H. Purbasari, *Modul Pelatihan SPSS*. Universitas Muhammadiyah Surakarta: PPA FEB, 2019.

[17] Sri Weni Utami, "Multiple Intelligences: Platform Global Paling Efektif untuk Pendidikan Abad ke-21 dalam Pendidikan dan Pembelajaran," *Pros. Semin. Nas. Call Pap. Psikol. Pendidik. 2019*, no. April, pp. 251–257, 2019.

[18] I. Parauba, "Pengaruh Kecerdasan Intelektual, Kecerdasan Emosional, Kecerdasan Spiritual dan Perilaku Belajar terhadap Pemahaman Akuntansi Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Sam Ratulangi Manado," *J. Ris. Akunt. dan Keuang.*, vol. 9, no. 2, 2014.

[19] N. K. A. Rusmiani, "Fakultas Ekonomi dan Bisnis Universitas Udayana (Unud), Bali , Indonesia Fakultas Ekonomi dan Bisnis Universitas Udayana (Unud), Bali , Indonesia ABSTRAK PENDAHULUAN Pendidikan akuntansi khususnya pendidikan tinggi akuntansi yang diselenggarakan di pe," vol. 20, pp. 959–985, 2017.

[20] A. Aulia and Subowo, "PENGARUH PENGENDALIAN DIRI, MOTIVASI, DAN PERILAKU BELAJAR TERHADAP TINGKAT PEMAHAMAN AKUNTANSI MAHASISWA," *Econ. Educ. Anal. J.*, vol. 10, 2016.

[21] M. Asih and F. Achyani, "Pengaruh Kecerdasan Intelektual, Kecerdasan Emosional, Kecerdasan Spiritual, Dan Kecerdasan Sosial Terhadap Pemahaman Akuntansi (Studi Kasus Mahasiswa Program Studi Akuntansi Angkatan Tahun 2011 Di Universitas Sebelas Maret Dan Universitas Muhammadiyah Su," 2011.

[22] R. Kristianawati and K. Z. Wafirotin, "Pengaruh Kecerdasan Intelektual, Kecerdasan Emosional, Kecerdasan Spiritual Dan Perilaku Belajar Terhadap Tingkat Pemahaman Akuntansi," *ISOQUANT J. Ekon. Manaj. dan Akunt.*, vol. 1, no. 1, p. 79, 2018, doi: 10.24269/iso.v1i1.47.

[23] N. Junifar and Kurnia, "Pengaruh Kecerdasan Emosional, Kecerdasan Spiritual, Dan Perilaku Belajar Terhadap Tingkat Pemahaman Akuntansi," *J. Ilmu Dan Ris. Akunt.*, vol. 4, no. 10, pp. 1–20, 2015.