ISSN (Online) 2456 -1304

International Journal of Science, Engineering and Management (IJSEM)
Vol 6, Issue 3, March 2021

Analysis Factor that Affects Accounting Learning Outcomes

[1] Ita Mustika, [2]Andi Hidayatul Fadlilah, [3]Maya Richmayati, [4] Andi Auliya Ramadhany, [5] Septa Diana Nabella
[1][2][3][4][5] Universitas Ibnu Sina, Batam,Indonesia

Abstract: - **The aim of this study is to determine the effect of the ability of English vocabulary in the field of Accounting on learning outcomes of computerized accounting with the understanding of accounting as moderating. The data of this research uses the data from the questionnaire filling and the academic score data from 58 respondents. The analysis model used is multiple linear regressions. The results of this study indicate that the ability of having English vocabulary in the field of accounting does not have a significant effect on the results of learning computerized accounting. Furthermore, this study also shows that the understanding of accounting has a significant influence as a moderator of the relationship between the ability of English vocabulary in the field of accounting to the results of learning computerized accounting.**

Key Words: Understanding of Accounting as moderator, English Language Skills in Accounting, Accounting learning outcomes.

1. INTRODUCTION

1.1 Background

The computerized accounting course at the Accounting Study Program at Ibnu Sina University is one of the leading courses on this information technology-based campus. The level of learning outcomes in accounting is influenced by various factors, one of which is the understanding of English vocabulary in accounting. This is because the computer program used in accounting learning is English. In addition, understanding the introduction of accounting is thought to strengthen the effect of understanding English vocabulary in accounting on the level of learning outcomes of a student in taking computerization courses. This research is important to do with the aim of knowing: (1) The effect of understanding English vocabulary in accounting on learning outcomes of accounting computerization (2) The effect of moderation in understanding the introduction to accounting on the effect of understanding English vocabulary in accounting on learning outcomes in accounting computerized course, whether strengthen or weaken[1][2][3]. The test of this study is different from previous studies which generally used respondents in vocational high school students. In the research, research respondents were developed on students with specificity in vocational students with the consideration that apart from the stronger vocabulary in English, vocational students were also provided with analysis in the use of computerized accounting applications[4][5][6][7]. The results of this study are expected to contribute to improving the way of learning English and the introduction of accounting so that students' understanding of computerized accounting courses can increase[8][9][10].

The formulations of the problem in this study are:

1. Does the understanding of English vocabulary in accounting affect the learning outcomes of computerized accounting?
2. Does the understanding of introduction to accounting moderate the effect of understanding English vocabulary in accounting on learning outcomes of computerized accounting?

II. Literature review

2.1 Review of Previous Research

Previous researches conducted by Lukmaningrum and Rochmawati who examined the effect of understanding English vocabulary on learning outcomes of Manufacturing computerized Accounting in students of SMKN 1 Lamongan concluded that computerization accounting learning outcomes were influenced by understanding English vocabulary either partially or simultaneously. In addition, research conducted by Maulidah also shows that mastery of English vocabulary in accounting has a significant effect on learning outcomes in accounting computer. Research by Pradhana & Latifah also concluded the same result, that mastery of English vocabulary in accounting has a significant effect on learning outcomes in accounting computers.

Research on understanding English vocabulary on learning outcomes of computerized accounting is highly important, this is because accounting computerization has become a demand in managing financial and accounting data. A good

ISSN (Online) 2456 -1304

International Journal of Science, Engineering and Management (IJSEM)
Vol 6, Issue 3, March 2021

understanding of computerized accounting also illustrates a good understanding of basic accounting concepts[11][12].

2.2 Moderation of Understanding Introduction to Accounting

Several studies have shown that understanding English vocabulary affects the learning outcomes of computerized accounting. Other research also proves that there are other variables that affect the understanding of English vocabulary as one of the factors that affect the results of learning computerized accounting. One of the strongest prediction of moderating the variable understanding of English vocabulary is Introduction to Accounting. This is a strong presumption because with a good understanding of Introduction to Accounting, it will increase the effect of understanding English vocabulary on the results of learning computerized accounting[13][14].

III. Methodology

Research Types and Data Sources

This type of research is a quantitative descriptive study because the data from this study are in the form of numbers which will later be analyzed using statistics. This research is a quantitative descriptive study with a population of 58 respondents. The data was collected by means of tests and documentation. In this study, the hypothesis test used multiple linear regression with the help of the WarpPLS software. This study aims to determine the effect of the independent variable on the dependent research variable in a study. This research is a research using the ex-post facto method. Ex-post facto research is research that is conducted to examine changes in the variables that have occurred and those that have been investigated have influenced other variables and determine the factors or cause and effect that caused the occurrence. This study aims to determine the effect of independent variables, namely the ability of English vocabulary in accounting (X1), moderation of understanding variables of introduction to accounting (X2) on learning outcomes of computerized accounting (Y).

The following is an overview of the framework in this study:

Population and Research Sample

The population in this study were all students of the 2018 class who were studying computerized accounting when this research was conducted with a total of 58 students. This study uses a saturated sampling technique, namely the sampling technique when all members of the population are used as samples.

Definition of Operational Variables

Each implementation of the variables in this study can be explained as follows.

Dependent Variable

Qudratullah explained that the dependent variable is the variable that is influenced or becomes a result because the variable is independent of change. The dependent variable in this study is the result of learning computerized accounting. This learning outcome is measured based on the final score of students in the Computerized Accounting Course.

Independent Variable

Supranto [17] explains that the independent variable is the variable that causes changes or the emergence of the dependent variable. The independent variable in this study is the Understanding of English Vocabulary. The variable for understanding English vocabulary is the respondent's ability to understand English vocabulary for terms that often appear in computerized accounting applications. This variable is measured based on the value of the English vocabulary questionnaire for accounting which is designed based on references in the Zahir Accounting application.

Moderation Variables

The moderating variable in this study is the Introduction to Accounting. The variable of introductory accounting understanding is the respondent's ability to understand accounting as an introduction. This variable is measured based on the introductory value to accounting. In this study, the accounting introductory variable is strongly suspected to be the moderating variable for the relationship between the variable understanding of English vocabulary to the variable

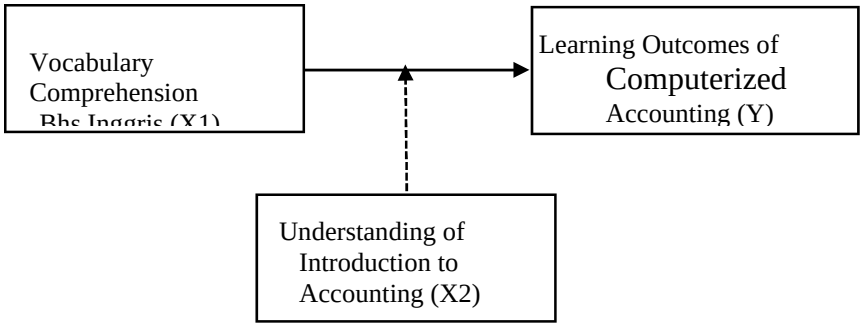

Figure 1. Research Framework

ISSN (Online) 2456 -1304

International Journal of Science, Engineering and Management (IJSEM)
Vol 6, Issue 3, March 2021

learning outcomes of computerized accounting.

Research Hypothesis

The hypotheses in this study are as follows:

In teaching and learning activities of accounting computerization used computerized accounting applications that use various English terms both on the application menu and the naming of the accounts used. With good English vocabulary skills, learning outcomes from computerized accounting will be better. Thus the first hypothesis in this study is formulated as follows:

H_1 = The ability of English vocabulary in accounting affects learning outcomes of computerized accounting

In the relationship between understanding English and computerization learning outcomes, it is suspected that there are moderating variables. This variable is the understanding of introduction to accounting. Good accounting understanding will increase the effect of English vocabulary skills on learning outcomes from computerized accounting. Thus the second hypothesis in this study is formulated as follows:

H_2 = Understanding Introduction to Accounting moderates the relationship between the ability of English vocabulary in accounting to learning outcomes of computerized accounting.

Data analysis technique

Data collection techniques in this study are using interviews, tests and documentation, interviews are a form of verbal communication between researchers and people related to the things being studied in order to obtain initial information and data about problems related to the variables to be studied. Interviews are used to find out problems that exist in learning so that researchers can determine what objects will be studied. The test is a series of questions or more that are used to measure the knowledge, skills, intelligence or abilities possessed by an individual or group. The test is used to measure or assess the respondent's understanding of accounting English vocabulary and introduction to accounting. Documentation is used to determine student respondent data and to take the value or learning outcomes of the Computerized Accounting Practicum.

Suliyanto explained that data analysis in research is essentially a process of processing data obtained in the field. The data analysis technique in this study was using WARP PLS. The analysis model in this study uses Structural Equation Modeling (SEM) analysis processed by the WarpPLS application. The use of this analytical model can identify and estimate the causal relationship among variables.

Hypothesis Test

Yamin explained that regression analysis is an approach used to define the mathematical relationship between the output / dependent variable (Y) and one or more input / independent variables (X). The equation model used in multiple linear regression analysis is as follows:

$Y = a + b_1X_1 + b_2 X_1{*}X_2 + e$ (1)

Description:

Y = Results of learning computerized accounting
a = Constants, the value of Y if X=0
b = Multiple linear regression coefficient
X_1 = English vocabulary skills of Accounting
X_2 = Understanding of introduction to accounting
$X_1{*}X_2$ = Moderation X_2 to X_1 e = eror Standard

The conclusion criteria are as follows:

If the significance value <0.05, then the alternative hypothesis (Ha) is accepted, namely that the independent variable partially affects the dependent variable. If the significance value> 0.05, then the alternative hypothesis (Ha) is rejected, that is, the independent variable partially has no effect on the dependent variable.

IV. Discussion

4.1 Data analysis

Based on the data obtained and processed from 58 respondents, the results of the fit model test showed that the P value for the Average Path Coefficient (APC) shows the number 0.028 where the value is below 0.05. Likewise, the Average Variance Inflation Factor (AVIF) value shows the number 1.547 where the number is below the number 5, which means that the research model is acceptable and ideal because it is also still below 3.3. Thus the data in this research model can be accepted and tested further.

4.2 Hypothesis Testing

The relationship between variables in this research model can be seen from the results of the structural model with its moderating effect and level of significance. The level of significance used in this study is 5%. The following is the output from the results of statistical processing to see the relationship between research variables:

ISSN (Online) 2456 -1304

International Journal of Science, Engineering and Management (IJSEM)
Vol 6, Issue 3, March 2021

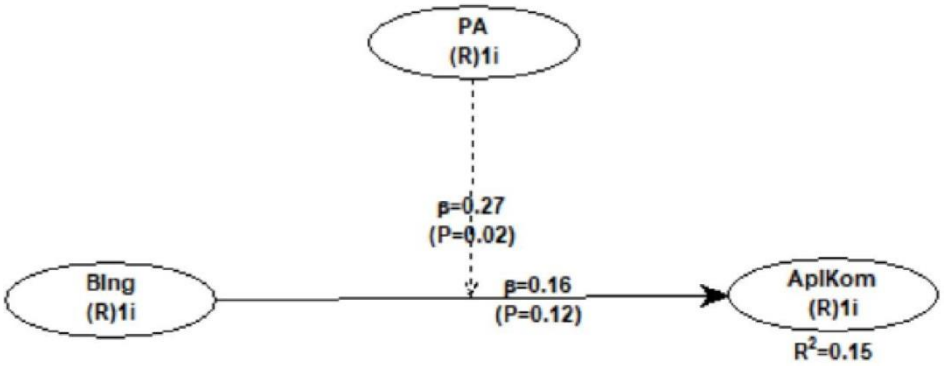

Figure 1. Results of Structural Model Analysis with Moderation Effects

Based on Figure 1 above, it is known that the P-Value of each relationship between variables is as follows:

Table 1. Coefficient of Structural Model Analysis with Moderation Effect

No	Hypothesis	Coefficient Value	Value P-Value	Description
1	H1= The ability of English vocabulary in accounting affects learning outcomes of computerized accounting	0.16	0.12	Not significant
2	H2= Understanding of Introduction to Accounting moderates the relationship between the ability of English vocabulary in accounting to the results of learning computerized accounting	0.27	0.02	Significant

4.3 The Effect of the Ability of English Vocabulary in the Field of Accounting on Learning Outcomes of Computerized Accounting

Based on the results of hypothesis testing in Table 1, the effect of the ability of English vocabulary in the field of accounting on the results of learning computerized accounting is found to have a p-value of 0.12. The p-value is 0.12> 0.05, which means that there is no significant effect of the variable of English vocabulary skills in accounting on the results of learning computerized accounting. So from the hypothesis testing above, it can be concluded that H_1 is rejected, meaning that there is no significant influence between the ability of English vocabulary in the field of accounting to the results of learning computerized accounting.

This may occur because the ability of English vocabulary does not become a dominant variable in influencing the results of learning computerized accounting. This is indicated by the value of R^2 = 0.15 which means that this research model is able to explain the results of learning computerized accounting by 15%, the rest is explained by other variables not studied. To increase the influence of English vocabulary skills in accounting requires moderation of other variables, this is in line with the results of previous studies.

4.4 The Effect of Understanding Moderation of Introduction to Accounting on the relationship between the ability of English vocabulary in the field of accounting to the results of learning computerized accounting

Based on the results of hypothesis testing in Table 1, the effect of Understanding Moderation of Introduction to Accounting on the relationship between the ability of English vocabulary in accounting to the results of learning computerized accounting shows a p-value of 0.02. The p-value is 0.02 <0.05, which means that there is a significant influence on the Understanding Moderation of Introduction to Accounting on the relationship between the ability of English vocabulary in accounting to the learning outcomes of accounting computerization. So from testing the hypothesis above, it can be concluded that H2 is accepted, meaning that

with a high understanding of accounting, the relationship between the influence of the ability of English vocabulary in the accounting field to the results of learning computerized accounting will increase. Likewise, on the other hand, a low understanding of introduction to accounting means that the relationship between the influence of English vocabulary skills in the accounting field on learning outcomes of computerized accounting will weaken. This is in line with the results of previous studies.

V. Conclusions and suggestions

5.1 Conclusions

This study aims to examine the influence of factors that affect learning outcomes of computerized accounting. This study examines the effect of the ability of English vocabulary in the field of accounting on learning outcomes of computerized accounting with the moderating effect of understanding of introduction to accounting. Based on the results of statistical tests, it shows that there is no significant effect of the variable of English vocabulary skills in the field of accounting on the results of learning computerized accounting. To increase the influence of English vocabulary skills in accounting requires moderation of other variables, this is in line with the results of this study. In the statistical test on the effect of moderation of the variable understanding of introduction to accounting, the result is that there is a significant effect of Moderation of Understanding of Introduction to Accounting on the relationship between the ability of English vocabulary in accounting to the results of learning computerized accounting. This means that a high understanding of the introduction to accounting can increase the effect of the ability of English vocabulary in the field of accounting to the results of learning computerized accounting.

VI. References

[1] Y. Yang, Y. Huang, and S. Member, "Mode Analysis and Q -Factor Enhancement Due to," vol. 43, no. 6, pp. 497–502, 2007.

[2] A. Coni, S. Mellone, M. Colpo, S. Bandinelli, and L. Chiari, "Influence of age and gender on sensor-based functional measures: A factor analysis approach," *Proc. Annu. Int. Conf. IEEE Eng. Med. Biol. Soc. EMBS*, vol. 2015-November, pp. 5054–5057, 2015, doi: 10.1109/EMBC.2015.7319527.

[3] C. L. A. Jacques, "Body scanning technology: An early human factors analysis," *Proc. - Int. Carnahan Conf. Secur. Technol.*, pp. 95–99, 2009, doi: 10.1109/CCST.2009.5335557.

[4] J. Wu and T. Zhao, "C-HFAMF: A new way to accident analysis considering human factor," *ICRMS'2011 - Saf. First, Reliab. Prim. Proc. 2011 9th Int. Conf. Reliab. Maintainab. Saf.*, pp. 319–322, 2011, doi: 10.1109/ICRMS.2011.5979283.

[5] B. Zheng, S. Xia, J. Chen, and Y. Jin, "Human factor analysis on marine accidents based on attribute reduction," *2009 Int. Conf. Meas. Technol. Mechatronics Autom. ICMTMA 2009*, vol. 2, pp. 499–502, 2009, doi: 10.1109/ICMTMA.2009.470.

[6] Y. Zhang, F. Xiong, Y. Xie, X. Fan, and H. Gu, "The Impact of Artificial Intelligence and Blockchain on the Accounting Profession," *IEEE Access*, vol. 8, pp. 110461–110477, 2020, doi: 10.1109/ACCESS.2020.3000505.

[7] R. A. Zuama, J. M. Hudin, D. Puspitasari, E. H. Hermaliani, and D. Riana, "Quality dimensions of Delone-McLean model to measure students' accounting computer satisfaction: An empirical test on accounting system information," *2017 5th Int. Conf. Cyber IT Serv. Manag. CITSM 2017*, 2017, doi: 10.1109/CITSM.2017.8089318.

[8] N. Reamaroon, M. W. Sjoding, K. Lin, T. J. Iwashyna, and K. Najarian, "Accounting for label uncertainty in machine learning for detection of acute respiratory distress syndrome," *IEEE J. Biomed. Heal. Informatics*, vol. 23, no. 1, pp. 407–415, 2019, doi: 10.1109/JBHI.2018.2810820.

[9] B. Kelana, A. Riskinanto, and I. N. Hayati, "SPOC adoption in accounting course among Indonesian undergraduate students: A case study," *Proc. - 2017 Int. Conf. Sustain. Inf. Eng. Technol. SIET 2017*, vol. 2018-January, pp. 405–409, 2018, doi: 10.1109/SIET.2017.8304172.

[10] X. Wang, C. M. Lai, Y. Hong, C. J. Hsieh, and S. F. Wu, "Multiple accounts detection on facebook using semi-supervised learning on graphs," *arXiv*, pp. 94–101, 2018.

[11] U. V. Chaudhari and M. Picheny, "Matching criteria for vocabulary-independent search," *IEEE Trans. Audio, Speech Lang. Process.*, vol. 20, no. 5, pp. 1633–1643, 2012, doi: 10.1109/TASL.2012.2186805.

[12] X. Zhu, "Study on the influence of voice on listening comprehension," *2011 IEEE 3rd Int. Conf. Commun. Softw. Networks, ICCSN 2011*, pp. 749–753, 2011, doi: 10.1109/ICCSN.2011.6014198.

[13] W. Tsou, W. Wang, and Y. Tzeng, "Applying computer multimedia storytelling Website in foreign language learning," *Proc. - 3rd IEEE Int. Conf. Adv. Learn. Technol. ICALT 2003*, no. 4, pp. 262–263, 2003, doi: 10.1109/ICALT.2003.1215074.

[14] R. T. Sataloff, M. M. Johns, and K. M. Kost, "No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する共分散構造分析Title."