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ANALYSIS OF STUDENT LEARNING HABITS FACTOR TOWARDS E-LEARNING EFFECTIVENESS IN XYZ UNIVERSITY

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ABSTRACT

In an overall educational process, learning activities are the most important activities. Along with the times, an innovation is needed in the learning process. E-learning is a learning method that uses electronic media as teaching material for students. At XYZ University, the use of e-learning is also applied in their learning system. The purpose of this study was to determine the effect of student study habits on the effectiveness of e-learning. The data were taken from 157 online student respondents XYZ University who were taking a master program and then analyzed using the smartPLS tool. It is known that the influential variables are Delay Avoidance, Work Method, Self-Efficacy, and Self-Directed Learning. The results of this study indicate that the Work Method and Self-Directed Learning factors have a positive and significant effect on the effectiveness of e-learning and can be considered to increase the effectiveness of the e-learning learning system.

Keywords: *Delay Avoidance, Work Method, Self-Efficacy, Self-Directed Learning, E-Learning Effectiveness*

1. INTRODUCTION

1.1 Background

In an overall educational process, learning activities are the most important activities. The success or failure of the learning objectives depends on how the learning process occurs in the students themselves. Along with the times, an innovation is needed in the learning process. In accordance with current conditions, technology is the most rapidly developing, especially the internet where the development of the internet is also in line with the learning process using E-Learning. In connection with learning, information technology in e-learning is needed not only to utilize technology and technology for the manufacture of teaching materials, but a design is needed in order to carry out learning effectively. In another sense, the E-Learning method means the distance learning process by combining the principles in the learning process with technology. [1] the learning system used as a means for the teaching and learning process can be implemented without having to meet face to face directly between lecturers and students. Technology shows many new characteristics that can be applied to make instruction more attractive to students. One of the institutions that runs the E-Learning program is XYZ University. Since 2001 XYZ University has implemented a learning system for individuals who want to learn and develop themselves without having to be tied to a specific schedule and place. XYZ University implements a multi-channel learning system using the Learning Management System which was built in-house. Hundreds of digital course content have been created and made available to serve around 24,000 active students each semester. The following are some of the learning methods applied by the learning system :

1) Interactive online learning by students with all lecturers and practitioner lecturers takes place intensively.
2) Course Materials or lecture materials in the form of Lecture Notes, Power Point Presentations and Multimedia are made in digital format.

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3) Discussion forums conducted online are specifically designed for virtual interactions between students and work groups and all lecturers, which are divided into :
   a. Class room: A discussion area for all class members related to the course.
   b. Team Room: A discussion area provided so that all students can work in groups with their respective groups.
4) Providing lecture materials and collecting assignments is carried out very flexibly through online access by every student.
5) Class conferences that allow lecturers and students to interact in real time like in a classroom.
6) Discussion of case studies through face-to-face meetings and implementation of examinations is carried out in the last week at the end of each lecture period.
7) The entire teaching and learning process is supported by modern facilities in the form of an Integrated Learning Management System and a Digital Library.

This research was conducted to determine the entire learning process carried out by students when participating in online learning. One important component of learning activities is study habits. Various students have varied learning practices based on their study habits and interest in the subject. Learning habits are ways of acting that are acquired through repeated learning, which in turn become permanent and automatic [2]. This habit arises because of the process of shrinking the response tendency by using repeated stimulation [3]. Each student has their own characteristics regarding their study habits, starting from managing lesson schedules, skills in completing independent and group assignments, critical thinking in solving problems, the ability to analyze material provided by lecturers and the free time they spend by reading books, articles or doing other activities. Through this study habit, students can apply methods or techniques to receive course material, read books, do assignments, and arrange time to complete activities. Through this research, it is expected to be a reference for educational institutions improving the quality and quality of E-Learning and providing effective understanding in order to build new e-learning strategies and more interest in learning students into effective learning habits. In addition, this study presents that the learning habits of each student can affect e-learning system used to see the effectiveness and quality of the course.

1.2 Research of Problem

Based on the background listed above, the problem in this study is :

1) What are the factors of learning habits that affect the effectiveness of E-Learning on XYZ University?
2) What are the factors of study habits that most influence the effectiveness of E-Learning on XYZ University?

1.3 Scope of Research

The scope of this research focuses on several things so that this discussion is clearer, thus it is limited to the following scope :

1) This research was conducted on all students who are still active at XYZ University, at the postgraduate level of education who are currently pursuing master's education online for the period 2019-2020.
2) The method used for evaluation after using e-Learning uses the User Experience Questionnaire (UEQ) method.
3) Focus on study habits and e-learning systems.

1.4 Research Objective

The objectives of this study are as follows :

1) Knowing what learning habits affect the effectiveness of E-Learning on XYZ University
2) Knowing what kind of study habits have the most influence on the effectiveness of E-Learning on XYZ University as a reference.

1.5 Previous Research

(Wahyuningsih, 2010) Analyzing the learning habits of delay avoidance and the Work Method in the Midwifery Study Program level II academic year 2010/2011, the sample is midwifery student class A semester III with a sample size of 60 respondents. Based on this analysis, it is found that these two variables have a significant effect on e-learning.

(Alfredo Saputra, 2016) In his research at SDN 105 Pekanbaru with a sample of 301 students, the results of the Delay Avoidance variable were significantly more influential than the Work Method variable.

(Budi Widarsa and Dindin Makhmudin, 2019) Behavior of learning habits in the use of e-learning at Padjadjaran University. Based on these studies, the self-efficacy factor has a significant effect on the use of Unpad e-learning factors. This means that the self-efficacy factor affects the use of e-learning and can encourage students to use e-learning Unpad.

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(Litasari W. Suwarsono, 2015) Research conducted by Litasari is measuring the learning habits of Telkom University engineering students in dealing with e-learning based learning systems. Studies show that the variable Self-Directed Learning from student perceptions needs to be considered as a priority for student development to support the effectiveness of e-learning in both face-to-face and non-face-to-face forms.

2. LITERATURE REVIEW

2.1 Definition of Study Habits

Habit is a way of doing or acting that is owned by a person and obtained through the learning process that method is permanent, uniform and automatic. The Liang Gie argued that "study habits are all behaviors that are shown steadily from time to time in the context of conducting the study". Study habits are not natural or innate talents, but behaviors that are learned intentionally or unconsciously from time to time repeatedly. Djaali [2] suggests "learning habits are a method or technique that settles on students when they receive lessons, read books, do assignments, and arrange time to complete activities". Furthermore, according to Djaali, study habits are divided into 2 parts, namely :

1) Delay Avoidance (DA). DA refers to the timeliness of completing academic tasks, avoiding things that may delay the completion of assignments, and eliminating stimuli that will interfere with learning concentration.
2) Work Methods (WM). WM refers to academic behavior related to effective and efficient learning procedures, study skills, and learning strategies. The work method is divided into three elements, if the three elements are applied appropriately by each student, it is possible to obtain optimal learning outcomes.

2.2 Establishment of Learning Habits

Habit is a way of doing or acting that is owned by a person and obtained through the learning process that method is permanent, uniform, and automatic.

2.3 Self-Efficacy

Belief or what is called self-efficacy expressed by [4], which is a self-perception of how well oneself can function in certain situations. Self-efficacy or self-efficacy is related to the belief that the self has the ability to take the expected action. Self-efficacy is also a self-assessment, whether you can do good or bad actions, right or wrong, you can or cannot do as required. So, it can be seen that self-efficacy describes self-assessment [5]. Someone who has high self-efficacy tends to do something with great effort and is full of challenges, on the other hand, individuals who have low self-efficacy will tend to avoid tasks and give up easily when problems arise [6].

2.4 Self-Direct Learning

Self-Directed Learning, independent learning is one of the abilities that distance education students or e-learning users must have. The meaning of this definition is to provide opportunities for students to determine learning objectives, plan the learning process, use selected learning resources, make academic decisions, and carry out activities to achieve learning goals [7].

2.5 E-Learning

E-learning is a teaching and learning process that uses electronic media specifically the internet as a learning system [8]. In the world there are many higher education institutions that use the internet and digital technology to be developed in teaching and learning activities [9]. To describe these various learning systems a number of terms are used such as computer mediated learning, web-based training and most often e-learning [10].

2.6 Application of E-Learning

The application of e-learning has many variations, due to its relatively new development. [11], emphasizes the application of e-learning in online learning and is divided into two, namely simple and integrated. Simple, which means learning materials that are entered into a web server and coupled with a communication forum via e-mail and / or mailing lists (mailing lists). Integrated application, which contains various learning materials that are equipped with multimedia and integrated with academic information systems, evaluation, communication, discussions, and various other educational facilities, so that it becomes an e-learning portal for example: Cisco Webex, Google Meet, Microsoft Teams, and others. The division mentioned above is based on observations from various web-based learning systems on the internet.

2.7 E-Learning Characteristic

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E-Learning has the nature of a network (Network), which makes it able to quickly repair, store or also retrieve, distribute, and share learning and information. Characteristics of E-Learning according to [12] :

a. Using self-learning materials which are then stored on a computer, so that it can be accessed by lecturers and students anytime and anywhere.
b. Utilizing a learning schedule, curriculum, learning progress results, and things related to an educational administration can be seen on each computer.
c. Utilizing an electronic technology service.
d. Utilizing an electronic technology service d. Take advantage of a computer (digital media and computer networks).

3. METHODOLOOGY

3.1 Theoretical Framework

In this study, quantitative research methods are used, namely research that departs from theory to data, and ends in acceptance or rejection of the theory used or can be interpreted by isolating certain variables and then linking them in a hypothesis, which then tests the hypothesis with the data collected. The following is a research model used in analyzing the effect of study habits and the effectiveness of e-learning. The framework in this study is as follows :

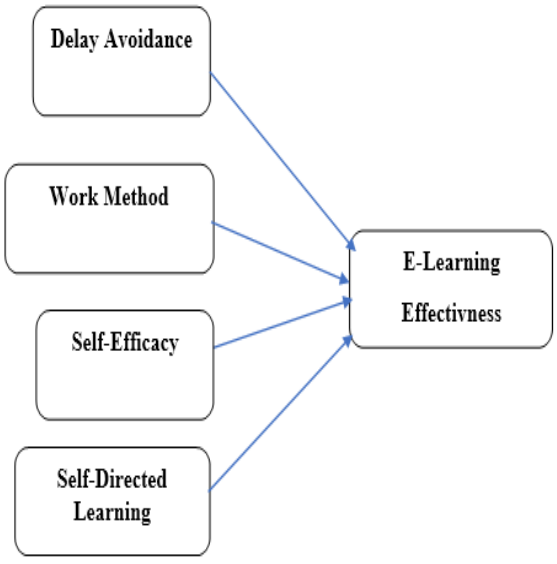

Figure 1. Theoretical Framework

3.2 Hypotheses

Based on the model that has been made, it can be concluded that the research hypothesis below :

- H1 : The factor of delay avoidance positively affects to e-learning effectiveness.
- H2 : The factor of work method positively affects to e-learning effectiveness.
- H3 : The factor of self-efficacy positively affects to e-learning effectiveness.
- H4 : The factor of self-directed learning positively affects to e-learning effectiveness.

3.3 Variable Measurement Indicator

In measuring variables, appropriate indicators are needed, these indicators are based on journal references and related research which then become the basic steps for making a questionnaire, the following variables measurement indicators will be carried out in the table below :

Table 1. Delay Avoidance Indicators.

Delay Avoidance	
Indicator	**Code**
Create a study schedule or plan	DA1
Regularity of study time	DA2
Accuracy in completing tasks	DA3
Do not delay in doing assignments	DA4

Table 2. Work Method Indicators.

Work Method	
Indicator	**Code**
Effective learning	WM1
Efficient workmanship	WM2
Carefully digest learning	WM3
Using strategies in learning	WM4

Table 3. Self-Efficacy Indicators.

Self-Efficacy	
Indicator	**Code**
Able to take action to achieve the intended results	SE1
Have confidence in self-potential in completing tasks.	SE2
Do not give up when there are obstacles in the completion of tasks	SE3
Work hard if you haven't reached your target	SE4

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Table 4. Self-Directed Indicators.

Self-Directed Learning	
Indicator	**Code**
Learn at the whim of individuals	SD1
Able to plan your own goal learning	SD2
Mastering materials in task work	SD3
Internal evaluation of self-learning performance	SD4

Table 5. E-Learning Effectiveness Indicators.

E-Learning Effectiveness	
Indicator	**Code**
Ability to practice what is learned in real form	EL1
Ability to absorb lessons through online learning	EL2
Minimal system constraints faced in online learning	EL3
Feedback errors from the system can resolve the issue	EL4

3.4 Data Analysis

The equation of structural model developed based on research model in Figure 1 are :

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$$

By using the regression equation above, the hypothesis that tests the regression equation can be described as follows:

- H1 : Delay avoidance positively affects to e-learning effectiveness.
  Ho : β1 = 0
  Ha : β1 ≠ 0
- H2 : Work method positively affects to e-learning effectiveness.
  Ho : β2 = 0
  Ha : β2 ≠ 0
- H3 : Self-efficacy positively affects to e-learning effectiveness.
  Ho : β3 = 0
  Ha : β3 ≠ 0
- H4 : Self-directed learning positively affects to e-learning effectiveness.
  Ho : β4 = 0
  Ha : β4 ≠ 0

4. RESULT AND DISCUSSION

4.1 Respondent Profile

The proportion of respondents based on the master's program is shown in Table 6, divided into three departments, namely Computer Science with 60 students, Industrial Engineering with 15 students and Information System Management with 82 students.

TABLE 6. RESPONDENT BY DEPARTMENT

Mater Program	Total
Computer Science	60
Industrial Engineering	15
Information System Management	82

4.2 Evaluation of Measurement Model (Outer Model)

This section will examine the loading factor value of the latent variable with each indicator and the Average Variance Extracted (AVE) value.

4.3 Measure of Validity

TABLE 7. OUTER LOADING RESULT

No.	Variabel	Indikator	AVE	Outer Loading	Validity
1	Delay Avoidance (DA)	DA1	0.745	0.879	Valid
		DA2		0.865	Valid
		DA3		0.848	Valid
		DA4		0.861	Valid
2	Work Method (WM)	WM1	0.735	0.852	Valid
		WM2		0.856	Valid
		WM3		0.875	Valid
		WM4		0.847	Valid
3	Self-Efficacy (SE)	SE1	0.583	0.787	Valid
		SE2		0.763	Valid
		SE3		0.772	Valid
		SE4		0.731	Valid
4	Self-Directed Learning (SD)	SD1	0.631	0.792	Valid
		SD2		0.79	Valid
		SD3		0.785	Valid
		SD4		0.81	Valid
5	E-Learning Efficacy (EL)	EL1	0.734	0.857	Valid
		EL2		0.853	Valid
		EL3		0.856	Valid
		EL4		0.86	Valid

In the table above, it is known that the outer loading and AVE values in this study have outer loading values above 0.7 for each indicator and the AVE value is greater than 0.5. There are no indicators that produce a value less than 0.7 and AVE value below 0.5 so that no single indicator is declared invalid and all indicators can be carried out to the next stage of

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testing, namely the reliability test. The following is a diagram of the loading factor for each indicator in the research model.

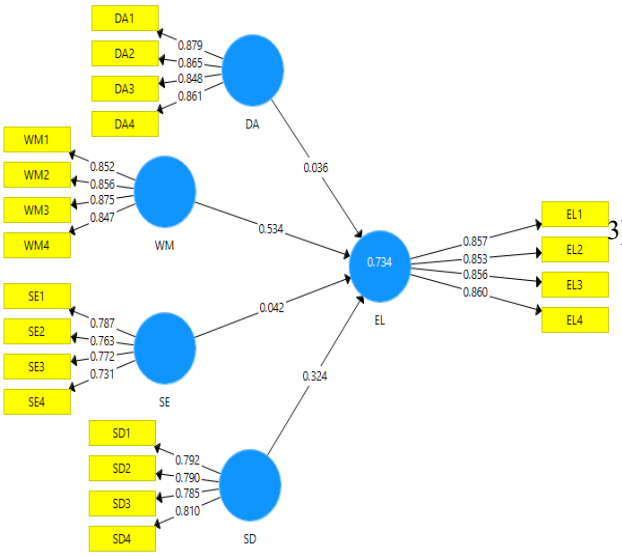

Figure 2. Loading Factor Value on Each Indicator

1) DA variable (Delay Avoidance)

It can be seen in Figure 3 that none of the indicators for the DA variable have a loading factor value below 0.6 so that all indicators are declared valid.

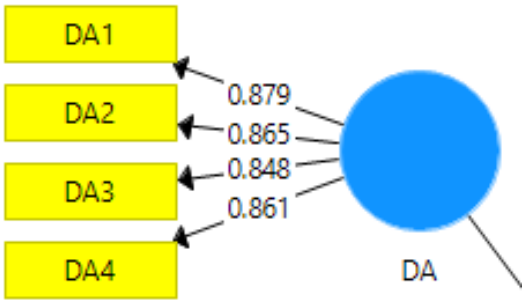

Figure 3. DA Variable Loading Factor Calculations

2) WM variable (Work Method)

It can be seen in Figure 4 that none of the indicators for the WM variable have a loading factor value below 0.6 so that all indicators are declared valid.

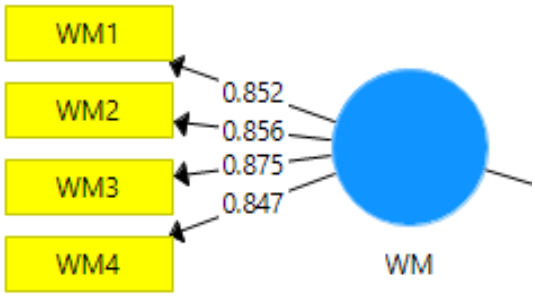

Figure 4. WM Variable Loading Factor Calculations

3) SE variable (Self-Efficacy)

It can be seen in Figure 5 that none of the indicators for the SE variable have a loading factor value below 0.6 so that all indicators are declared valid.

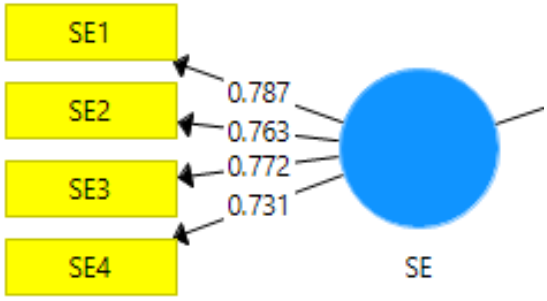

Figure 5. SE Variable Loading Factor Calculations

4) SD variable (Self-Directed Learning)

It can be seen in Figure 6 that none of the indicators for the SD variable have a loading factor value below 0.6 so that all indicators are declared valid.

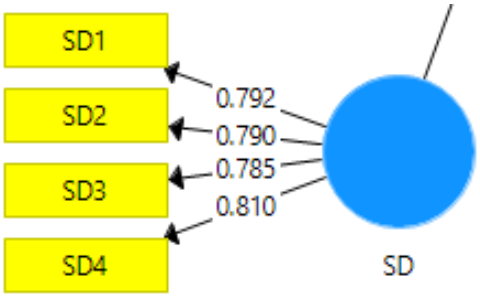

Figure 6. SD Variable Loading Factor Calculations

5) EL variable (E-Learning Effectiveness)

It can be seen in Figure 7 that none of the indicators for the EL variable have a loading factor value below 0.6 so that all indicators are declared valid.

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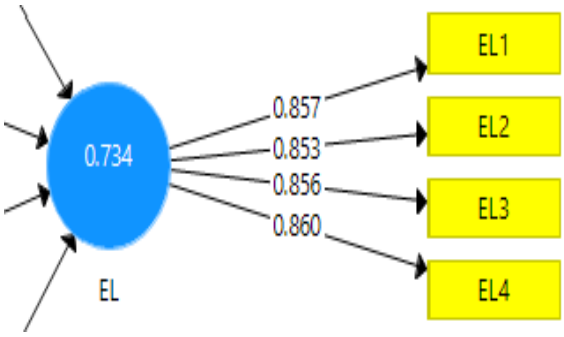

Figure 7. EL Variable Loading Factor Calculations

4.4 Discriminant Validity

Discriminant validity is used to ensure that each concept of each construct or latent variable is different from other variables. Table 8 below shows the results of the discriminant validity of the research model by looking at the cross-loading value.

TABLE 8. DISCRIMINANT VALIDITY

	DA	WM	SE	SD	EL
DA1	0.879	0.453	0.269	0.371	0.404
DA2	0.865	0.499	0.353	0.448	0.445
DA3	0.848	0.468	0.278	0.424	0.376
DA4	0.861	0.422	0.363	0.429	0.468
WM1	0.435	0.852	0.374	0.624	0.676
WM2	0.457	0.856	0.386	0.652	0.712
WM3	0.472	0.875	0.421	0.675	0.739
WM4	0.462	0.847	0.38	0.699	0.691
SE1	0.331	0.346	0.787	0.573	0.457
SE2	0.265	0.38	0.763	0.578	0.386
SE3	0.274	0.372	0.772	0.629	0.429
SE4	0.251	0.291	0.731	0.498	0.371
SD1	0.406	0.63	0.551	0.792	0.614
SD2	0.444	0.657	0.558	0.79	0.645
SD3	0.337	0.574	0.659	0.785	0.61
SD4	0.353	0.592	0.609	0.81	0.625
EL1	0.416	0.751	0.428	0.657	0.857
EL2	0.41	0.718	0.464	0.696	0.853
EL3	0.457	0.671	0.474	0.68	0.856
EL4	0.408	0.675	0.489	0.658	0.86

Based on the data presented in table 8 above, it can be seen that each indicator in the research variable has the largest cross loading value on the variable it forms compared to the cross loading value on other variables. Based on the results obtained, it can be stated that the indicators used in this study have good discriminant validity in compiling their respective variables.

4.5 Measure of Reliability

Reliability test can be done by looking at the results of the value of Cronbach's alpha. A variable can be declared reliable if it has a composite reliability value > 0.6. The following is the Cronbach's alpha value of each variable used in this study :

TABLE 9. RELIABILITY TEST RESULTS

Variable's	Cronbach's Alpha
Delay Avoidance	0,886
Work Methods	0,880
Self-Efficacy	0,763
Self-Direct Learning	0,805
E-Learning Effectiveness	0,879

From the table above, it shows that the value of Cronbach's alpha in each variable has a value above 0.6, which means it proves that all variables in the model can be said to be reliable, with the variable having the greatest value is delay avoidance which has a value of 0.886 and the variable with a value. the smallest result is self-efficacy with a result value of 0.763. it also shows that the two results of composite reliability and Cronbach's alpha have a high level of reliability because the value of the smallest variable is still above 0.75.

4.6 Composite Reliability

Apart from measuring the outer model by assessing the convergent validity and discriminant validity, it can also be done by looking at the construct reliability or latent variables measured by looking at the composite reliability value of the indicator block measuring the construct. The smartPLS output results for the composite reliability value can be seen in Table 10 :

TABLE 10. COMPOSITE RELIABILITY VALUE

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Variabel	Composite Reliability
Delay Avoidance	0,921
Work Method	0,917
Self-Efficacy	0,848
Self-Direct Learning	0,872
E-Learning Effectiveness	0,917

Based on the data presented in Table 10, it can be seen that the composite reliability value of all research variables is > 0.70. These results indicate that each variable has met the composite reliability so that it can be concluded that all variables have a high level of reliability.

4.7 Evaluation of the Structural Model (Inner Model)

After the estimated model has met the criteria of the Outer Model, then an evaluation test will be carried out for the structural model or what is commonly known as the Inner Model. The following are the results of the R-Square value in this study :

TABLE 11. RESULT OF R-SQUARE VALUE

	R-Square	R-Square Adjusted
E-Learning Effectiveness	0,734	0,728

From the Table 11, it is known that the variation in E-Learning Effectiveness (EL) is explained by the variation in the independent variable of 0.734 (73.4%). the remaining 26.6% is explained by independent variables that are not included in the model. apart from r-square testing, assessing the inner model can be done by looking at the t-statistics and original sample (o). The following are the values of the path coefficient and T-statistics from this study obtained from the smartPLS output :

TABLE 12. PATH COEFFICIENTS AND T-STATISTICS

No.	Hipotesis	Original Sampel (O)	T statistics	P Values	Explanation
1	Delay Avoidance ➡ E-Learning Effectiveness	0,036	0,474	0,636	Not Significant
2	Work Method ➡ E-Learning Effectiveness	0,534	3,269	0,001	**Significant**
3	Self-Efficacy ➡ E-Learning Effectiveness	0,042	0,362	0,717	Not Significant
4	Se lf-Direct Learning ➡ E-Learning Effectiveness	0,324	2,186	0,029	**Significant**

4.8 Hypothesis Testing

1) H1 : Delay Avoidance (DA) has a positive effect on E-Learning Effectiveness (EL).
   From the results of data processing using smartPLS, it is known that the original sample value (O) which is the path coefficient value and the T-statistic value shows its significance and it is known that the p value is smaller than the tolerable limit. The test results show that the relationship between the Delay Avoidance (DA) variable) on E-Learning Effectiveness (EL) has a T-Statistical value of 0.474 and a P-value of 0.636, so this proves that there is a positive but insignificant effect. Thus, Ha is rejected, and H0 can be accepted. Or in other words H1 can be declared rejected.
2) H2 : Work Method (WM) has a positive effect on E-Learning Effectiveness (EL).
   From the results of data processing using SmartPLS, it is known that the original sample value (O) which is the path coefficient value and the T-statistic value shows its significance and it is known that the p value is smaller than the tolerated limit. The test results show that the relationship between the Work Method (WM) variable on E-Learning Effectiveness (EL) has a T-Statistical value of 3.269 and a P-value of 0.001, so this proves that there is a positive and significant effect. Thus, H0 is rejected, and Ha can be accepted. Or in other words H2 is acceptable.
3) H3 : Self-Efficacy (SE) has a positive effect on E-Learning Effectiveness (EL).
   From the results of data processing using SmartPLS, it is known that the original sample value (O) which is the path coefficient value and the T-statistic value shows its significance and it is known that the p value is smaller than the tolerated limit. The test results show that

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the relationship between the Self-Efficacy (SE) variable on E-Learning Effectiveness (EL) has a T-Statistical value of 0.362 and a P-value of 0.717, so this proves that there is a positive but insignificant effect. Thus, Ha is rejected, and H0 can be accepted. Or in other words H3 can be declared rejected.

4) H4 : Self-Directed Learning (SD) has a positive effect on E-Learning Effectiveness (EL).
From the results of data processing using SmartPLS, it is known that the original sample value (O) which is the path coefficient value and the T-statistic value shows its significance and it is known that the p value is smaller than the tolerated limit. The test results show that the relationship between the variable Self-Directed Learning (SD) and E-Learning Effectiveness (EL) has a T-Statistical value of 2.186 and a P-value of 0.029, so this proves that there is a positive and significant effect. Thus, H0 is rejected, and Ha can be accepted. Or in other words H4 is acceptable.

4.9 Hypothesis Interpretation

1) H1 : Delay Avoidance (DA) has no significant effect on E-Learning Effectiveness (EL).
The first hypothesis is not proven to have a significant effect between Delay Avoidance on E-Learning Effectiveness. This indicates that the application of Delay Avoidance learning habits in the XYZ University environment does not affect the E-Learning Effectiveness.
2) H2 : Work Method (WM) has a significant effect on E-Learning Effectiveness (EL).
The second hypothesis is proven to have a positive effect on the Work Method on E-Learning Effectiveness. This indicates that the application of the Work Method learning habits in the XYZ University environment affects the E-Learning Effectiveness. The students believe that having these study habits will increase the effectiveness of E-Learning.
3) H3 : Self-Efficacy (SE) has no significant effect on E-Learning Effectiveness (EL).
The third hypothesis is not proven to have a significant effect between Self-Efficacy (SE) on E-Learning Effectiveness. This indicates that the application of Self-Efficacy learning habits in the XYZ University does not affect the E-Learning Effectiveness.
4) H4 : Self-Directed Learning (SD) has a significant influence on E-Learning Effectiveness (EL).
The fourth hypothesis is proven to have a positive effect between facilitating conditions on E-Learning Effectiveness. This indicates that the application of self-directed learning habits in the XYZ University environment affects the effectiveness of e-learning. XYZ University students believe that having these study habits will be able to increase the effectiveness of E-Learning. Believe that having these study habits will be able to increase the effectiveness of E-Learning.

4.10 Compare finding to literature

First, delay avoidance has no effect on the effectiveness of e-learning. Given that this study focuses on the effectiveness of the e-learning system, because indeed with a delay in learning, the e-learning system students still provide information about the subjects being studied.

Second, self-efficacy has no effect on the effectiveness of e-learning. this is because the system may not be able to fully read the potential of a student in a certain achievement.

Third, the e-learning system has not been able to describe the characteristics of a person through student learning. Therefore, there is a need for socialization between students and e-learning system. Although e-learning provides good education, it cannot change the learning habits that have been applied by students for a long time

5. CONCLUSION

Based on the results of research regarding the Analysis Of Student Learning Habits Factor Towards E-Learning Effectiveness In XYZ University, the following conclusions can be drawn :

1) Hypothesis testing shows that the relationship between the independent variables (Work Method and Self-Direct Learning) and the dependent variable (E-Learning Effectiveness) has a positive effect. With this, it is known the factors of student learning habits that increase the effectiveness of e-learning at XYZ University. So that if all independent variables / factors are enhanced by XYZ University, the use of e-learning plays a very important role in the learning habits of these students.
2) Hypothesis testing also shows that all the relationships between the independent variables (Delay Avoidance and Self-Efficacy) on the dependent variable (E-Learning Effectiveness) do not have a positive effect. So that the study habits adopted by S2 students do

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not have a significant effect on increasing the effectiveness of e-learning on XYZ University.

Overall, based on the data obtained from the research results, the factor that has the most significant influence on the e-learning effectiveness variable is Work Method variable with P-Values of 0.001. The implication is that the role of students will have a major effect on the e-learning system if their learning habits are trying to develop learning strategies, efficiency in doing academic tasks and proficiency in learning techniques. Therefore, the system can prepare a material syllabus that is easy to digest and adapt their learning strategies.

6. SUGGESTION

From the research results, suggestions for the Knowledge Management System at PT XYZ can be given as follows :

1) Over time and technology is developing so that the e-learning system can be improved, especially in interpreting student learning habits in the work method and self-direct learning factors.
2) So that the system can continue to be updated considering that the need for data and information on student learning habits is increasing day by day, so the system must support these needs.
3) Furthermore, for further research, in order to add other variables of 26.6% of the various theories that exist into this model.

REFRENCES:

[1] Chandrawati, Sri Rahayu. (2010). *Pemanfaatan Elearning dalam Pembelajaran.* No 2 Vol. 8. http://jurnal.untan.ac.id/

[2] Djaali. (2015). *Psikologi Pendidikan.* Jakarta :Bumi Aksara.

[3] Muhibbin, Syah. (2008). *Psikologi Pendidikan.* Bandung: Remaja Rosdakarya.

[4] Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. USA: W.H. Freemen dan Company.

[5] Alwisol. (2004). *Psikologi Kepribadian.* Malang : Universitas Muhammadiyah Malang.

[6] Retno, N.W, Machmuroch, Priyatama, A.N. (2014). *Tingkat Burnout ditinjau dari Strategi Coping dan Efikasi Diri pada Perawat Rumah Sakit Jiwa Surakarta*. CJ-Vol.3 No.3. hal 197-205.

[7] Seamolec, Seameo. (2008). *Pendidikan Jarak Jauh (PJJ)*. Jakarta: Seameo-Seamolec.

[8] Komendangi, (2016). *Analisis dan Perancangan Aplikasi E-learning berbasis Learning Manajemen System (LMS) Moodle di Program Studi Teknik Pertanian Universitas Sam Ratulangi*. Manado : Universitas Sam Ratulangi

[9] Harsasi, M. (2011). *Pengembangan Computer-Assisted Instruction Sebagai Bahan Ajar Pada Universitas Terbuka.* Prosiding Konferensi Nasional ICT-M Politeknik Telkom (KNIP), p92-98.

[10] Ifijeh, G., Osinulu, I., Esse, U., Adewole-Odeshi, E., & Fagbohun, M. (2015) *Assessing E-Learning Tools in an Academic Environment: A Study of Availability and Use among Undergraduate Students in a Nigerian University.* International Journal of Progressive Education; 11(2).76-87

[11] Surjono, Herman Dwi. (2011). *Membangun Course E-learning Berbasis Moodle.* Yogyakarta: UNY Press. Nursalam dan Ferry Efendi. 2008. Pendidikan dalam Keperawatan. Jakarta: Salemba Medika.

[12] Nursalam dan Ferry Efendi. (2008*). Pendidikan dalam Keperawatan*. Jakarta: Salemba Medika.