THE EFFECT OF STUDENT BEHAVIOR ON THE USE OF CAMPUS JOURNALS BY ADOPTING THE TAM METHOD

Asrul Sani[1*]; Agusta Pratama Wibawa[2]; Nur Nawaningtyas Pusparini[3]; Adrial Rusyid [4]; Anton Hindardjo[5]

Informatics
STMIK Widuri
www.kampuswiduri.ac.id
asrulsani@kampuswiduri.ac.id; agustapratama17@gmail.com; tyaspusparini@kampuswiduri.ac.id

Management
Universitas Muhammadiyah Tangerang
www.umt.ac.id
adrial@umt.ac.id

Management
Sekolah Tinggi Ekonomi Islam SEBI
www.sebi.ac.id
anton.hindardjo@sebi.ac.id

(*) Corresponding Author

Abstract— This research is a quantitative study using statistical analysis based on SEM-PLS in the analysis process. Collecting data using random sampling where respondents fill out a questionnaire simultaneously by conducting interviews. The number of respondents produced was 203 students from various universities who used website-based campus journals. The Technology Acceptance Model (TAM) is the reference in the model used, on the grounds that TAM is a technology acceptance model that is widely adopted in research based on acceptance technology, in this case, the use of campus journals. Initial data processing, coding according to the data, using SPSS, then using SmartPLS 3.0. The results obtained based on the analysis of measurement models and structural models are that student behavior in using journals gives positive results on the scientific development that they want to obtain from the journal. This is shown from the measurement model testing which shows all indicators accompanying the variables, giving positive results based on convergent validity, discriminant validity, and model reliability. Meanwhile, the structural model testing is calculated based on the path coefficient, determination, predictive relevance, and t-test. The number of path analyses obtained is four, the result is that all paths have a significant path coefficient, strong model determination, good predictive relevance and the results of the t-test for all variables that are interconnected based on the path formed are acceptable. These results prove that the behavioral effect of using campus journals by adopting TAM as the model used produces positive results.

Keywords: TAM, SmartPLS, SEM, Quantitative, Journal.

Abstrak— Penelitian ini merupakan penelitian kuantitatif dengan menggunakan analisa statistika berbasis SEM-PLS dalam proses analisis. Pengambilan data menggunakan random sampling dimana responden mengisi kuesioner bersamaan dengan melakukan wawancara. Jumlah responden yang dihasilkan sebanyak 203 mahasiswa dari berbagai perguruan tinggi yang menggunakan jurnal kampus berbasis website. Technology Acceptance Model (TAM) menjadi acuan dalam model yang digunakan, dengan alasan TAM merupakan model penerimaan teknologi yang banyak di adopsi dalam penelitian yang berbasis teknologi penerimaan dalam hal ini penggunaan jurnal kampus. Pengolahan data awal, dilakukan pengkodean yang disesuaikan dengan data, menggunakan SPSS, yang selanjutnya menggunakan SmartPLS 3.0. Hasil yang didapatkan berdasarkan analisis measurement model dan structural model adalah perilaku mahasiswa dalam penggunaan jurnal memberikan hasil yang positif terhadap perkembangan keilmuan yang ingin diperoleh dari jurnal tersebut. Hal ini ditunjukkan dari pengujian measurement model yang menunjukkan semua indikator yang menyertai variabel, memberikan hasil yang positif berdasarkan validitas convergent, validitas discriminat dan realibilitas dari model. Sedangkan dari pengujian structural model dihitung berdasarkan path coefficient, determinasi, predictive relevance dan t-test. Jumlah analisis jalur yang diperoleh ada empat, hasilnya semua jalur memperoleh path coefficient yang signifikan, determinasi model

yang kuat, predictive relevance yang baik dan hasil t-test semua variabel yang saling berhubungan berdasarkan jalur yang terbentuk dapat diterima. Hasil ini membuktikan bahwa efek perilaku penggunaan jurnal kampus dengan mengadopsi TAM sebagai model yang digunakan, menghasilkan hasil yang positif.

INTRODUCTION

Student behavior is an activity carried out by students towards each individual and group that can be observed directly or indirectly covering several aspects of daily life, in the learning process of lectures and the campus environment to provide responses or reactions to achieve a goal. So that you get a concrete assessment as well as support for the results of student activeness that will be obtained as well as a benchmark for the development of science in a complex and structured manner, which is then identified in the context of the parts of learning [1]

According to Skinner [2] behavior change can be seen from the form of response which includes stimulus, behavior is divided into 2 types of grouping, first closed behavior, namely stimulus-response that occurs covertly which is still limited to aspects of attention, perception, knowledge, awareness, and attitudes that occur in individuals and have not been seen clearly or randomly, while the second is open behavior, namely the individual's response to the form of reality that occurs is clear in an action that is implemented easily and can be studied flexibly. Based on the point of view of known student behavior, it has an important role in the learning process such as campus journal visits. [3][4]

Campus journal visits are activities carried out from observations including surveys or directly examining campus journals within the scope of higher education to obtain relevant information while utilizing available services then analyzing and considering in factual form to provide an overview as knowledge where there are various kinds of branching knowledge around certain aspects and can be used as a reference to understand the meaning of this knowledge, the purpose of continuous campus journal visits to journal accreditation is to increase the potential of the journal [5][6]

The method in this research is carried out by using quantitative research where this research is more likely to analyze a student's behavior which will get results following those in the field and the Technology Acceptance Model (TAM) method, TAM is a technology acceptance model from certain aspects that affect and most widely used in the field of Information Technology or information systems. Therefore, TAM extensively uses various elements of the model intending to get a viewpoint from the TAM side and a more concrete or valid explanation of the existing technology acceptance process both individually and in groups [7][8][9]

The relationship between student behavior and the TAM method on visits to campus journal websites is very important for students, where they will know how much their perception of acceptance is. The TAM variable used consists of 4 variables, namely, perceived ease of use, perceived usefulness, attitude toward using, and behavioral intention to use which is poured into a questionnaire to find out and evaluate the results of student behavior based on the calculations in the TAM so that at the end of the process TAM concludes to meet existing information on-campus journal visits [10][11][12]

Table 1. Research Literature

	Research Problem	Literature
RP1	The environment that affects students in knowledge development, as well as behavioral changes that occur	The environment that makes students have to change, student behavior in the use of technology, the importance of technological knowledge to support student activities [1] [2] [3][4]
RP2	How students can use campus-based journals as a source of information to find references for writing scientific papers Readiness of students to use website-based campus journals	Campus journals as a means of student reference, student readiness in web journals, use of web-based journals, and knowledge of student behavior in the use of these journals, as well as viewing the model used. [5][6][7]
RP3	Technology Acceptance Model is one of the technologies developed to see student behavior using technology.	The use of TAM as a behavior regulator in using technology is used in various organizations. Measurement using TAM can use several methodologies [8][9] [10][11]

From the information sources in the literature in the table above, it can be seen that the use of technology in an organization is absolute. The problem is how we measure the user by using it. Many researchers have previously measured the use of technology using the TAM model, but only 2 studies have been discussed specifically for student journals in Indonesia. The novelty of this research is that the analysis used is SmartPLS 3.0 by testing measurement models and structural models. In the meantime, the two previous studies did not use the method used in this study. In addition, the study took samples from several universities in Jakarta and Depok as a source of respondents so that they had a good impact on this research.

This study aims to analyze and evaluate student behavior towards campus journals so that it is known the perception of acceptance of campus journals among students. This study uses four variables in TAM, namely perceived ease of use, perceived usefulness, attitude in use, and behavioral intention. Calculation analysis using SmartPLS 3.0 software. The questionnaire used in this study uses the Linkert scale so that later can be determined the value of the measurement and structural analysis obtained. The two questions posed as a guide in conducting this research are;

Q1: What is the level of acceptable behavior of campus journals against the conditions of existing journals?
Q2: What factors influence the level of student behavior in existing campus journals?

From the results of the research questions above, a hypothesis will be formed which will explain the relationship between the variables in the TAM model. This paper will be divided into four parts, where the first part will explain the background of taking the title, problem, research objectives, and research questions. The second part will explain several related theories that refer to previous research and related to the Technology Acceptance Model (TAM) theory. This section will also describe aspects of the research methodology that will provide an overview of the research phases, starting with model development, data collection, and, finally, data processing. The initial test will measure the validity level of the questionnaire, especially how the prospective respondents understand the contents of the research questions. The research will use a special sampling technique based on key informational aspects [13][14][15]

A total of 203 respondents were obtained in this study, and the collected data would be edited and coded using Ms. software Excel and SPSS. Meanwhile, the quantitative analysis process uses the SEM-PLS approach with SmartPLS 3.0. The third part will explain the analysis obtained after processing the data in the form of discussions and the next stages of research.

The interpretation will be carried out on the basis of the results of the analysis, with the main consideration of the results of the quantitative analysis supported by the results of the descriptive analysis. And the last part will provide conclusions that will later be used as a reference for further research. Theoretically, this study will provide an overview of how students perceive journal acceptance, especially final year students. The involvement of interested parties in using campus journals can represent the validation of measurements based on the definition of TAM, namely how technology can be utilized by those who use it.

MATERIALS AND METHODS

The study of the influence of student behavior on campus journals using the TAM method is carried out into seven main stages (Figure 1). The initial study (1) was carried out by making initial preparations, namely looking at the scope of the research, where the literature study and the preparation of the model that will be used as the research base include looking at the types of campus journals, and the social aspects of the IS study, for example, usability, satisfaction, and readiness [16][17]. Model initiation (2) becomes part of the research, namely making preparations such as the tools and tools used. The third stage is conducting design research, finding indicators that match the research theme based on TAM theory. The measurement model test (4) is the next stage to ensure the level of reliability and validity of the model is achieved. After the reliability and validity meet the required requirements, the structural model test is continued, which simultaneously performs descriptive analysis and inferential analysis.

Refers to the research points identified in the early stages of the research as described in the introduction, in particular the research questions section; this research was conducted to answer the above questions using a quantitative approach [13][18] by applying the researcher's objective point of view on how to determine the status of student behavior in progress and examining the relationship between variable variables in TAM. In particular, following the predetermined approach, the next phases of research also adjust to the approach using quantitative methods, techniques, and tools as demonstrated by the research process. For example, the data collection technique was carried out by means of a survey with a

questionnaire research tool, the data analysis was carried out statistically with related computer software [19][20]
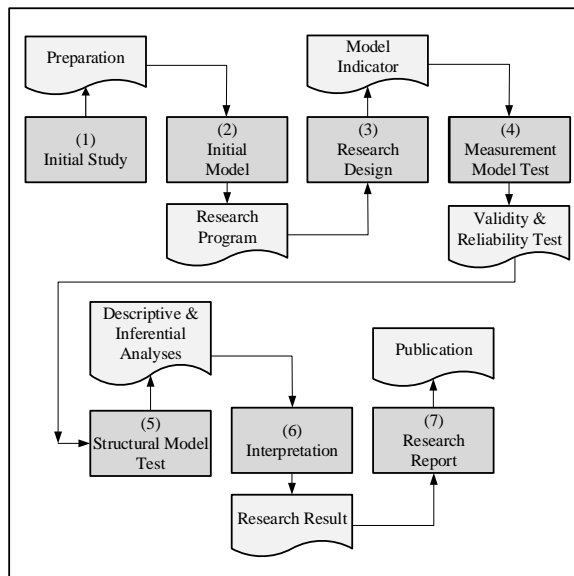

Figure 1. Research Procedure

The SEM equation model is a popular analysis technique used in social science research and computer science based on computer behavior or social computers. This analysis technique is a combination of two scientific discipline methodologies, namely the econometric perspective that focuses on prediction and psychometrics which can describe the model concept. Latent variables (variables that cannot be measured directly) but are measured through the indicators (manifest variables). SEM essentially offers the ability to perform path analysis with latent variables.

Partial Least Square Analysis Structural Equation Model (PLS-SEM) usually consists of two sub-models, namely the measurement model or often called the outer model, and the structural model or often called the inner model. The measurement model shows how the manifest or observed variable represents the latent variable to be measured, while the structural model shows the power of estimation between latent variables. The latent variables formed in PLS-SEM have indicators that can be reflective or formative. Reflective indicators are indicators that are manifestations of the construct and are following the classical test theory which assumes that the variance in the measurement of the latent variable score is a function of the true score plus the error. Meanwhile, the construct and are following the classical test theory which assumes that the variance in the measurement of the latent variable score is a function of the true score plus the error.

Meanwhile, formative indicators are indicators that define characteristics or explain constructs. In TAM there are elemental constructions that have not been modified, of which construction has the main component, namely, perceived ease of use, perceived usefulness, an attitude of use (attitude towards using), and finally behavioral intention to use. And then the structure of the image which includes the construction elements of TAM is as follows 8
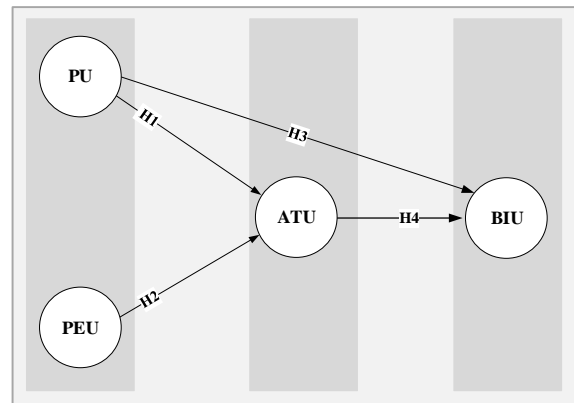

Figure 2. Research Model

The TAM model used in this study uses the variable Perceived Usefulness (PU), Perceived Ease of Use (PEU), Attitude Toward Using (APU), and Behavioral Intention to Use (BIU). All variables were adopted from previous research. Furthermore, a hypothesis is made to explain the relationship between the relationships in the research question. The hypothesis that is formed is:

H1: Perceived usefulness has a significant effect on Attitude Toward Using

H2: Perceived Ease of Use has a significant effect on Attitude Toward Using

H3: Perceived usefulness has a significant effect on Behavioral Intention to Use

H4: Attitude Toward Using has a significant effect on Behavioral Intention to Use.

RESULTS AND DISCUSSION

The results of the respondent profile analysis can be seen in Table 1 below, where this table shows the importance of reliability and validity of the data sources obtained [21][22]. From the number of respondents as many as 203, it is known that the number of respondents with female gender is 114 people (56.2%) and this number is more than the number of respondents with male gender as many as 89 people (43.8%).

For the age category of respondents, namely 18-20 years, there were 12 people, 21-24 years old totaling 155 people and for the age category above 24 years, there were 36 people.

Analysis of the measurement model

The method most often used by researchers in the field of SEM for measurement model analysis through confirmatory factor analysis is to use the Multi Trait Multi-Method approach with convergent validity, discriminant validity, and reliability testing.

Convergent validity testing, where this test is done by looking at the standardized loading factor value. This value illustrates the magnitude of the correlation between each measurement item or indicator and its variables. The limit value is above 0.7 if the indicator is said to be valid as an indicator that measures the variable. In Figure 2 and Table 1 below, it can be seen that all indicators show values above 0.7, and all indicators are declared valid. Besides, for convergent validity testing, the Average Variance Extracted (AVE) value must be above 0.5. In table 1, it can be seen that all the variables show that they are acceptable because the limiting value exceeds 0.5.
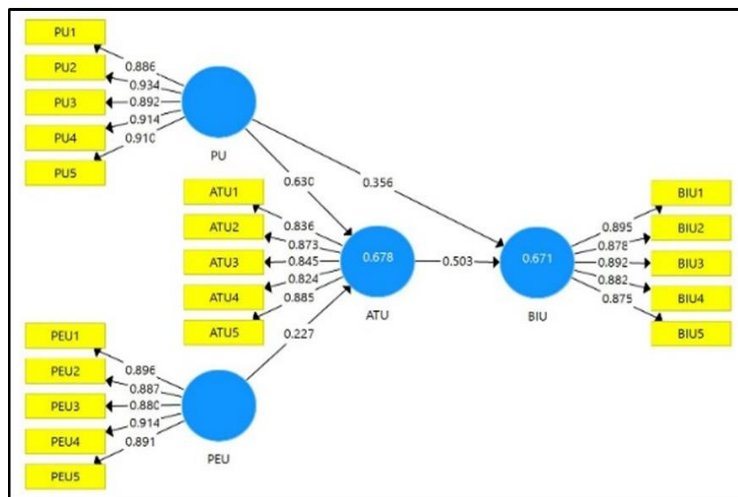

Figure 3. Path diagram of the measurement model test.

Table 2. Statistical results of the measurement model

VAR	IND	OL	CROSSLOADING (CL)				AVE	CA	CR	R²
			PU	PEU	BIU	ATU				
PU	PU1	0.886	**0.886**	0.741	0.727	0.793				
	PU2	0.934	**0.934**	0.729	0.705	0.713				
	PU3	0.892	**0.892**	0.736	0.669	0.700	0.823	0.946	0.959	
	PU4	0.914	**0.914**	0.709	0.662	0.719				
	PU5	0910	**0.910**	0.745	0.703	0.754				
PEU	PEU1	0.896	0.685	**0.896**	0.665	0.679				
	PEU 2	0.887	0.741	**0.887**	0.648	0.666				
	PEU 3	0.880	0.752	**0.880**	0.670	0.679	0.799	0.937	0.952	
	PEU 4	0.914	0.740	**0.914**	0.607	0.636				
	PEU 5	0.891	0.688	**0.891**	0.608	0.619				
BIU	BIU 1	0.895	0.731	0.675	**0.895**	0.741				
	BIU 2	0.878	0.677	0.629	**0.878**	0.722				
	BIU 3	0.892	0.665	0.609	**0.892**	0.709	0.782	0.930	0.947	0.671
	BIU 4	0.882	0.661	0.635	**0.882**	0.677				
	BIU 5	0.875	0.643	0.620	**0.875**	0.650				
ATU	ATU1	0.836	0.769	0.743	0.715	**0.836**				
	ATU 2	0.873	0.767	0.690	0.713	**0.873**				
	ATU 3	0.845	0.585	0.514	0.587	**0.845**	0.727	0.907	0.930	0.678
	ATU 4	0.824	0.556	0.465	0.571	**0.824**				
	ATU 5	0.885	0.736	0.662	0.753	**0.885**				

Discriminant validity testing, carried out by two stages of cross loading testing, namely, cross-loading between indicators and cross-loading Fornell-Lacker. Cross loading indicator is checked by comparing the correlation of indicator variables with one another. If the correlation between indicators with variables is higher with other variables, it can be said that these variables predict the size of the block better than other blocks. Checking Fornell-Lacker's cross-loading is by looking at the root value of AVE. The root value of AVE must be higher than the correlation between one variable and another. Table 1 shows that all cross-loading indicator values with the variable are

higher with the correlation to other variables. In table 2, it shows that the root value of AVE is higher when compared to the correlation between variables on other variables.

Table 3. Discriminant validity of Fornell-Lacker's

	ATU	BIU	PEU	PU
ATU	**0.853**			
BIU	0.793	**0.884**		
PEU	0.735	0.717	**0.894**	
PU	0.813	0.765	0.807	**0.907**

In addition to the validity test, model measurement is also carried out to test the reliability of a variable. A reliability test is conducted to prove the accuracy, consistency, and accuracy of the instrument in measuring variables. To measure the reliability of a variable with reflective indicators, it can be done by looking at the value of Cronbach's Alpha (CA) and Composite Reliability (CR). The limit value used for both tests is a value above 0.7. Based on table 1 above, it can be seen that all variables have a value above 0.7 and this shows that the model has reliable variables.

The value of the test shows that all the results of the student questionnaire give a positive response, the resulting indicator values for the PU, PEU, ATU, and BIU variables are all above 0.82

even though the limit of the indicator value for exploratory research is above 0.7. This shows that the questionnaire filled out is well understood by the respondents. Based on the results of testing the outer model, both indicators and variables, it can be concluded that for variables, PU, PEU, ATU, and BIU can be continued for inner model testing.

Analysis of the structural model (inner model)

This analysis uses two testing procedures, namely by using bootstrapping testing and blindfolding testing. Bootstrapping test analysis was carried out on the path coefficient (β), determination coefficient (R^2), effect size (f^2) based on the R^2 value and t-test, while for blindfolding it was carried out by testing predictive relevance (Q^2) and the q^2 value calculated based on the value Q^2. Figure 3 shows the path diagram for the results of the research model for testing.

The path coefficient test (β) is carried out to test the β value, where the value is> 0.1 which indicates a significant effect of the model. The coefficient of determination (R^2) test was carried out to explain the independent variable with a standard measurement value of about 0.670 for the strong variant, 0.333 for the moderate variant, and 0.190 for the weak variant.
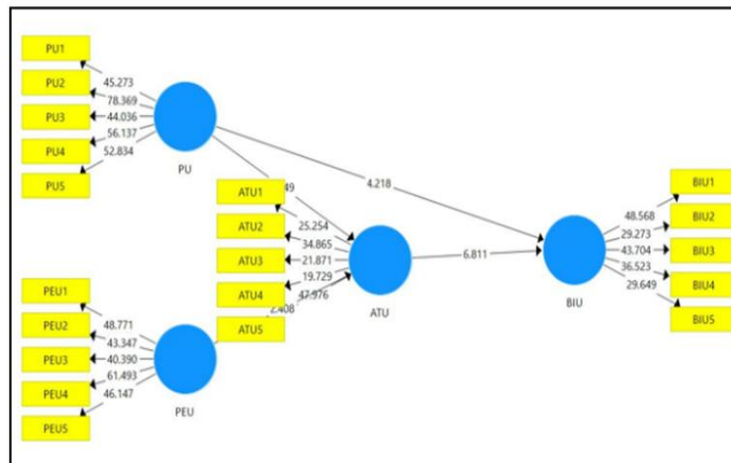

Figure 4. Path diagram of the structural model test.

To calculate the effect size f 2, the formula is needed:

$$f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}} \quad \dots\dots\dots\dots\dots\dots\dots\dots (1)$$

$$q^2 = \frac{Q^2_{included} - Q^2_{excluded}}{1 - Q^2_{included}} \quad \dots\dots\dots\dots\dots\dots\dots (2)$$

From the formula above, the values of f^2 and q^2 can be obtained, where the standard

measurement values are 0.02 for small effect sizes, 0.15 for medium effect sizes, and 0.35 for large effect sizes. The predictive relevance (Q^2) test is conducted to determine the predictive relationship between certain variables and other variables with measurement limits above zero. Hypothesis testing (t-test) uses a two tailed test with a significance of 5%, meaning that the hypothesis will be accepted if it has a t-test> 1.96 [19][20]

Table 4. Structural Model Analysis Results

Path	β	R^2	Q^2	f^2	q^2	t-test	Analysis					
							β	R^2	Q^2	f^2	q^2	t-test
PU → ATU	0,63	0,68	0,47	0,31	0,11	6,31	Sign	Strong	Predictive	Strong	Moderate	Accept
PEU → ATU	0,23	0,68	0,47	0,05	0,01	2,29	Sign	Strong	Predictive	Moderate	Weak	Accept
PU → BIU	0,35	0,67	0,52	0,09	0,04	4,25	Sign	Strong	Predictive	Moderate	Strong	Accept
ATU → BIU	0,50	0,67	0,52	0,00	0,00	6,56	Sign	Strong	Predictive	Weak	Weak	Accept

In table 4 above, it can be seen that all paths have a significant effect because they have a value of β > 0.1, namely the PU → ATU, PEU → ATU, PU → BIU, and ATU → BIU pathways. The resulting R^2 test for the PU → ATU line is strong with a value of 67.8%, the PEU → ATU line is strong with a value of 67.8%, the PU → BIU line is also strong with a value of 67.1%, and finally the ATU → BIU line also strong with a value of 67.1%. The resulting Q^2 test for all pathways shows Q^2> 0 and this shows that it has predictive relevance for all variables. For the f^2 test, the PU → ATU is strong with a value of 31%, the PEU → ATU is moderate with a value of 5%, the PU → BIU is moderate with a value of 9%, and the ATU → BIU is weak with a value of 0. Hypothesis testing (t-test) for all lines in an accepted position because for all paths namely PU → ATU, PEU → ATU, PU → BIU, and ATU → BIU have a value> 1.96.

The independent variables in this study namely perceived usefulness (PU) and perceived ease of use (PEU), each have a major influence on student behavior and student habits using website-based journals. This is also seen from the age of using the journal. The biggest users are those aged 21-24 years, which are indeed students who are in the process of doing practical work or the process of writing a thesis. The habit shown by students proves that website-based campus journals are very supportive of student work in doing assignments and final assignments. When viewed from the large percentage, female students dominate the use of campus journals. The habit of using the internet also affects students to view existing campus journal journals. This is because the level of ease in accessing journals is felt by students to be easy to access. The dependent variable also has a big influence on this research. This can be seen from the determination value of R^2 which shows that all pathways are above 67%. This possibility is due to the positive response obtained from students using campus journals. Experience the ease of downloading or getting access, has a very positive impact when filling out the questionnaire. In the behavior intention (BIU) variable, it can be seen that the R^2 value is 67.1%, which indicates a good response from the user, and the ease of accessing the journal is also a consideration.

CONCLUSION

The behavior of using internet technology (behavior intention) to use campus journals is very necessary for students who are working on assignments, especially final assignments. This behavior is also influenced by perceived usefulness and perceived ease of use in utilizing this technology so that there is a desire to use campus journals. The age factor affects students in using campus journals, but the gender factor does not influence the interest in using campus journals. The results of the measurement model analysis show that all indicators and variables meet the threshold requirements. Testing of convergent validity, discriminant validity, and reliability shows that the value of cross loading, Cronbach's Alpha, average variance extracted, and composite reliability meets the predetermined threshold values, and based on this, the model is continued to analyze the structural model. When viewed from the influencing variables, the independent variable, and the dependent variable influence each other. This can be seen from the structural model analysis by testing the path coefficient values for all paths giving a significant value. Likewise, the coefficient of determination test gives strong results for these lines. Another test is predictive relevance, which provides that all pathways have predictive value. The final test is to see the t-test value which shows that all paths in the TAM model are acceptable. All the results above gave a positive response to the questionnaire conducted, especially when filling out the questionnaire conducted by students, in this case, the behavior of using campus journals.

This research is preliminary research for the TAM model with the subject of behavior towards campus journals. In the future, further research will be carried out using other reference models that may have a modified model to improve information systems research.

REFERENCES

[1]   Á. Zsóka, Z. M. Szerényi, A. Széchy, and T. Kocsis, "Greening due to environmental education? Environmental knowledge, attitudes, consumer behavior and everyday pro-environmental activities of Hungarian high school and university students," in *Journal of Cleaner Production*, 2013, vol. 48, pp. 126–138.

[2] E. S. Djatikusuma and H. Widagdo, "Analisa Perilaku Calon Mahasiswa Terhadap Minat Untuk Menjadi Mahasiswa Di Sekolah Tinggi Ilmu Ekonomi Multi Data Palembang Menggunakan Metode Unifield Theory Of Acceptance And Use Of Technology (UTAUT)," *J. Ilm. STIE MDP*, vol. 5, no. 1, pp. 46–55, Sep. 2015.

[3] K. Perilaku, J. Surya, and K. Amri, "Kajian Perilaku Mahasiswa Dalam Menggunakan Internet Dengan Pendekatan Technology Acceptance Model (TAM)," *J. Penelit. Pos dan Inform.*, vol. 3, no. 1, pp. 67–80, 2013.

[4] S. T. Muntianah, S. Astuti, and D. F. Azizah, "Pengaruh Minat Perilaku Terhadap Actual Use Teknologi Informasi dengan Pendekatan Technology Acceptance Model (TAM) (Studi Kasus Pada Kegiatan Belajar Mahasiswa Fakultas Ilmu Administrasi Universitas Brawijaya Malang)," *PROFIT J. Adm. Bisnis*, vol. 6, no. 1, pp. 88–113, 2012.

[5] A. H. Harahap and I. M. Pasaribu, "Layanan Pemustaka Terhadap Tingkat Kunjungan Pada Perpustakaan Universitas Tjut Nyak Dhien Medan," *J. Net. Libr. Inf.*, vol. 1, no. 1, pp. 30–39, 2018.

[6] "Analisis pemanfaatan jurnal elektronik oleh mahasiswa menggunakan Technology Acceptance Model (TAM)," *Harmon. Sos. J. Pendidik. IPS*, vol. 6, no. 2, pp. 175–182, 2019.

[7] M. Al-Emran, V. Mezhuyev, and A. Kamaludin, "Technology Acceptance Model in M-learning context: A systematic review," *Comput. Educ.*, vol. 125, pp. 389–412, 2018.

[8] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Q. Manag. Inf. Syst.*, vol. 13, no. 3, pp. 319–339, 1989.

[9] A. Granić and N. Marangunić, "Technology acceptance model in educational context: A systematic literature review," *Br. J. Educ. Technol.*, vol. 50, no. 5, pp. 2572–2593, Sep. 2019.

[10] R. Estriegana, J. A. Medina-Merodio, and R. Barchino, "Student acceptance of virtual laboratory and practical work: An extension of the technology acceptance model," *Comput. Educ.*, vol. 135, pp. 1–14, Jul. 2019.

[11] K. L. Hakim, "Analisis Penggunaan Unnes Journals Berdasarkan Pendekatan Technology Acceptance Model (TAM) Pada Mahasiswa Program Studi Pendidikan Akuntansi Universitas Negeri Semarang," Universitas Negeri Semarang, Semarang, 2016.

[12] A. Sani, N. Wiliani, A. Budiyantara, and N. Nawaningtyas, "Pengembangan Model Adopsi Teknologi Informasi terhadap Model Penerimaan Teknologi diantara UMKM," *JITK (Jurnal Ilmu Pengetah. dan Teknol. Komputer)*, vol. 5, no. 2, pp. 151–158, Feb. 2020.

[13] J. W. Creswell and J. D. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Los Angeles: SAGE Publications, 2017.

[14] A. Subiyakto and A. R. Ahlan, "Implementation of input-process-output model for measuring information system project success," *TELKOMNIKA Indones. J. Electr. Eng.*, vol. 12, no. 7, pp. 5603–5612, 2014.

[15] A. Sani, N. Nawangtyas, A. Budiyantara, and N. Wiliani, "Measurement Of Readiness And Information Technology Adoption Based On Organizational Context Among," *J. Pilar Nusa Mandiri*, vol. 16, no. 2, pp. 225–232, Sep. 2020.

[16] R. P. Aritonang, S. Sumarlin, and R. Kaban, "Kajian Tingkat Kepuasan Mahasiswa Terhadap Sistem Informasi Berbasis Web dengan Metode Technology Acceptance Model(TAM)," *J. TEKESNOS*, vol. 1, no. 1, pp. 40–47, Dec. 2019.

[17] S. S. Alam, M. Y. Ali, and M. F. M. Jani, "An empirical study of factors affecting electronic commerce adoption among SMEs in Malaysia," *J. Bus. Econ. Manag.*, vol. 12, no. 2, pp. 375–399, 2011.

[18] Sugiyono, *Metode Penelitian Bisnis (Pendekatan Kuantitatif, Kualitatif, dan R&D)*. Bandung: Alfabeta, 2018.

[19] K. K.-K. Wong, "Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS," *Mark. Bull.*, vol. 24, no. 1, pp. 1–32, 2013.

[20] J. F. Hair, M. Sarstedt, C. M. Ringle, and J. A. Mena, "An assessment of the use of partial least squares structural equation modeling in marketing research," *J. Acad. Mark. Sci.*, vol. 40, no. 3, pp. 414–433, May 2012.

[21] A. Subiyakto, A. R. Ahlan, M. Kartiwi, N. Hakiem, M. Q. Huda, and A. Susanto, "The Information System Project Profiles among Universities in Indonesia," *Indones. J. Electr. Eng. Comput. Sci.*, vol. 12, no. 2, pp. 865–872, 2018.

[22] A. Subiyakto, "Development of the Readiness and Success Model for Assessing the Information System Integration," in *Conference: The 2nd International Conference on Science and Technology (ICOSAT)*, 2017, pp. 110–115.