# STUDENT BEHAVIOR IN UTILIZATION INTERNET OF LIBRARY BASED ON INFORMATION

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Abstract: The research objective is to examine the effect of social factors on intention and their impact on student behavior in utilization internet of library as an information media. The method used is the survey method by distributing questionnaires. The research data obtained is based on the perception student of Universitas Semarang students on the utilization internet of library carried out by the Universitas Semarang Library as a student information media, with 95 respondents. The research method uses validity test, reliability test, and classic assumption test, hypothesis test, multiple linear regression model (path analysis) with SPSS 23 program. The results of testing social factors directly and indirectly through the intention in using internet of library do not effect on student behavior in utilization internet of library carried out by Universitas Semarang students as their information media

**Keywords**: social factors, intention, behavior

Abstrak: Tujuan penelitian untuk menguji pengaruh faktor sosial terhadap minat dan dampaknya pada perilaku mahasiswa dalam pemanfaatan internet perpustakaan sebagai media informasi. Metode yang digunakan adalah metode survei dengan menyebarkan kuesioner. Data penelitian yang diperoleh didasarkan pada persepsi mahasiswa Universitas Semarang atas pemanfaatan internet perpustakaan yang dilaksanakan oleh Perpustakaan Universitas Semarang sebagai media informasi mahasiswa, dengan responden sebanyak 95 orang. Metode penelitian menggunakan uji validitas, uji reliabilitas, dan uji asumsi klasik, uji hipotesis, model regresi linier berganda (path analysis) dengan program SPSS 23. Hasil pengujian faktor sosial secara langsung dan tidak langsung melalui minat pemanfaatan internet perpustakaan tidak berpengaruh terhadap perilaku mahaiswa dalam pemanfaatan internet perpustakaan yang dilaksanakan oleh mahasiswa Universitas Semarang sebagai media informasi mereka.

Kata kunci: faktor sosial, minat, perilaku

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#### **INTRODUCTION**

Information is a resource that is no less important than factories, equipment, and other company assets.<sup>1</sup> Information Technology (IT) has developed and expanded in all areas of life so that it can improve work effectiveness and efficiency. Large and risky funds are investments faced by the organization. In order to compete, an organization needs an evolving information system, so that decision-making tools are expected to be able to provide good information, not only among businesses and the government, but also to universities. In connection with this, information technology has a very important position in universities, especially the internet library.

Internet libraries related to the use of computer / internet technology. Computer / internet based internet library is a series of hardware and software designed to transform data into useful information for universities, especially students in order to follow the teaching and learning process. The use of the internet as an individual's behavior to utilize information technology because of the benefits that will be obtained to assist in completing the work. When a technology is believed to be more useful, more important or provide a relative advantage, it will cause someone's interest to use the technology.<sup>2</sup>

Information technology in higher education are expected to be used to improve the quality of student in learning, such as facilitating student to access the Internet easily by making it easy to get the information from online sites. The internet library conducted by the Universitas Semarang can help students and facilitate their lectures as well as information media. Therefore, the use of the internet library is greatly influenced by the behavior of students who use it.

In Indonesia, research on the factors that influence the behavior of IT utilization has been carried out. Rahmawati<sup>3</sup> and Tjhai<sup>4</sup> have examined the factors

<sup>2</sup> Rini Handayani, "Analisis Faktor-Faktor Yang Mempengaruhi Minat Pemanfaatan Sistem Informasi Dan Penggunaan Sistem Informasi (Studi Empiris Pada Perusahaan Manufaktur Di Bursa Efek Jakarta)" (PhD Thesis, PROGRAM PASCA SARJANA UNIVERSITAS DIPONEGORO, 2005).

<sup>&</sup>lt;sup>1</sup> George H. Bodnar, "Dan Williams S. Hopwood. 2003," Accounting Information Systems, n.d.

<sup>&</sup>lt;sup>3</sup> Diana Rahmawati, "Analisis Faktor Faktor Yang Berpengaruh Terhadap Pemanfaatan Teknologi Informasi," *Jurnal Ekonomi Dan Pendidikan* 5, no. 1 (2008).

<sup>&</sup>lt;sup>4</sup> Tjhai Fung Jin, "Analisis Faktor-Faktor Yang Mempengaruhi Pemanfaatan Teknologi Informasi Dan Pengaruh Pemanfaatan Teknologi Informasi Terhadap Kinerja Akuntan Publik," *Jurnal Bisnis Dan Akuntansi* 5, no. 1 (2003): 1–26.

that influence the behavior of information technology utilization. The results of his research indicate that there is a positive and significant influence between social factors and the behavior of information technology utilization. On the other hand, Hasyim<sup>5</sup> found different research results, namely there was no influence between social factors on the utilization of information technology.

Based on the inconsistency of the results of the research that occurred in the studies above, this study will solve the solution to the inconsistency by adding new variables as the intervening variable, namely the intention in using the internet library. From these things, as far as the researcher knows, the researchers have never been studied before and for the researcher this is a research gap that needs to be done. The research objective is to examine the effect of social factors on studen behavior in utilization internet of library with intention as an intervening variable.

#### RESEARCH METHODS

This study uses primary data obtained through the distribution of questionnaires to students of the Universitas Semarang Academic Year 2018/2019 which uses the internet of library in order to carry out its lectures as an information medium, which is also a population. The sample in this study was taken by simple random sampling technique with a total of 95 students at the Universitas Semarang. The method for collecting data is the survey method and from various supporting sources. Data analysis uses quantitative analysis with path analysis (using SPSS 23).

#### THEORITICAL REVIEW

**Information Technology (Internet)** 

Effective use of information technology can contribute to organizational performance. Therefore, organizational members must be able to use information technology properly. One important aspect to understand the use of information technology is to understand the factors that can influence the use of information technology. The use of information technology is also very much needed to

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M. Hasyim, "Analisis Pengaruh Eekspektasi Kinerja, Ekspektasi Usaha Dan Faktor Sosial Terhadap Penggunaan Sistem Informasi (Studi Kasus PT. Semen Bosowa Maros)," *Universitas Hasanuddin, Makassar*, 2010.

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improve the existence and productivity of the management of education in higher education. At present almost all universities compete in developing learning systems that utilize the internet.<sup>6</sup> Research conducted by Brynjolfsson and Hitt<sup>7</sup> provides empirical evidence that investment in information technology can contribute positively to individual performance and company productivity. Rockart (1988),<sup>8</sup> information technology has an important role because it can be a strategic weapon for an organization in gaining competitive advantage. Meanwhile Rahmawati<sup>9</sup> states that investment in information technology in an organization mostly aims to be able to make a positive contribution to the performance of individual members of the organization and its institutions. One of the main sources of information is the Internet because all information can be found using certain keywords through the internet. The internet is also the fastest and most actual source of information. The internet offers a new alternative in acquiring information and simultaneously disseminating information.

## **Behavior**

An information technology can have a positive impact on behavior, if the technology is properly utilized and must have a match with the tasks supported.<sup>10</sup> A person's behavior is an expression of someone's desire or interest (intention), where the desire is influenced by social factors (Triandis, 1980). The existence of benefits felt by users of information technology will increase their interest in using information technology.<sup>11</sup> A person's belief in the usefulness of information technology will increase their interest and in the end the individual will use information technology in his work or in other words the existence of future

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<sup>&</sup>lt;sup>6</sup> Desy Iba Ricoida and Desi Pibriana, "Pengaruh Penggunaan Internet Terhadap Minat Dan Perilaku Belajar Mahasiswa," *SESINDO 2016* 2016 (2016).

<sup>&</sup>lt;sup>7</sup> Lorin M. Hitt and Erik Brynjolfsson, "Productivity, Business Profitability, and Consumer Surplus: Three Different Measures of Information Technology Value," MIS Quarterly, 1996, 121–142.

<sup>&</sup>lt;sup>8</sup> John Fralick Rockart and James E. Short, "Information Technology and the New Organization: Towards More Effective Management of Interdependence," 1988.

<sup>&</sup>lt;sup>9</sup> Rahmawati, "Analisis Faktor Faktor Yang Berpengaruh Terhadap Pemanfaatan Teknologi Informasi."

Dale L. Goodhue and Ronald L. Thompson, "Task-Technology Fit and Individual Performance," MIS Quarterly, 1995, 213–236.

<sup>&</sup>lt;sup>11</sup> Ann C. Davis et al., "Intermolecular Disulfide Bonding in IgM: Effects of Replacing Cysteine Residues in the Mu Heavy Chain.," *The EMBO Journal* 8, no. 9 (1989): 2519–2526.

rewards is also a factor that can influence the interest in using information technology to use information technology.<sup>12</sup>

Information technology is used as a means of supporting the organization to achieve its goals.<sup>13</sup> The use of information technology as the behavior of an individual to use information technology because of the benefits that will be obtained to assist in completing the work. Intention refers to the goals of individuals to perform various diverse behaviors and can be considered as specific reasons for belief. Triandis (1980) argues that a person's behavior is an expression of a person's wants or interests (intention). Another opinion expressed by Goodhue and Thompson<sup>14</sup> who said that the use of information systems is a behavior to use information technology in completing tasks.

#### Intention

Thoery of Planned Behavior (TPB) is a special model that has been proven to be successful in predicting and explaining a person's behavior in utilizing a technology. This TPB explains the factors that influence the behavior of an individual, where an individual will take an action based on the factors that influence it. According to TPB, intention is a function of behavior. Someone will do a behavior (behavior) if they have the desire or interest (behavioral intention) to do so Interest in utilization can be said in the form of expressions of desire or hope someone by using technology continuously can have a positive impact on them. Their interest will increase to use information technology if it feels useful. Other researchers also suggested that a person's belief in the benefits of information technology would increase their intention and eventually the individual would

<sup>&</sup>lt;sup>12</sup> Ronald L. Thompson, Christopher A. Higgins, and Jane M. Howell, "Personal Computing: Toward a Conceptual Model of Utilization," *MIS Quarterly*, 1991, 125–143.

<sup>&</sup>lt;sup>13</sup> Rahmawati, "Analisis Faktor Faktor Yang Berpengaruh Terhadap Pemanfaatan Teknologi Informasi."

<sup>&</sup>lt;sup>14</sup> Goodhue and Thompson, "Task-Technology Fit and Individual Performance."

<sup>&</sup>lt;sup>15</sup> Martin Fishbein and Icek Ajzen, "Misconceptions about the Fishbein Model: Reflections on a Study by Songer-Nocks," *Journal of Experimental Social Psychology* 12, no. 6 (1976): 579–584.

<sup>&</sup>lt;sup>16</sup> Heru Nugroho, "Demokrasi Dan Demokratisasi: Sebuah Kerangka Konseptual Untuk Memahami Dinamika Sosial-Politik Di Indonesia," *Jurnal Pemikiran Sosiologi* 1, no. 1 (2012): 1–15.

<sup>&</sup>lt;sup>17</sup> Davis et al., "Intermolecular Disulfide Bonding in IgM."

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behave to utilize information technology in their work.<sup>18</sup> Many factors that influence the behavior of information technology utilization include intention. The intention in using information technology is the level of desire or intention of users to use technology continuously with the assumption that they have access to information. Intention is a subjective probability of someone to do something (Ajzen, 1995). Handayani (2007) in his research showed that intention in the use of information technology did not affect the use of information systems. Meanwhile other researchers actually oppose the results of this study and state that there is a positive influence between intention in the use of information systems on the behavior of information systems utilization.<sup>19</sup>

#### **Social Factors**

According to the model developed by Thompson et al.,<sup>20</sup> which adopted some of the theories proposed by Triandis (1980), states that one of the factors that influence the behavior of information technology utilization is Social Factors. Social factors are defined as the degree to which an individual assumes that another person assures himself that he must use information technology. In certain environments, the use of information technology will improve the status (image) of someone in the social system.<sup>21</sup> Thompson's results, et al.,<sup>22</sup> found a positive and significant influence between the social factors of technology users, where social factors were shown by the support of colleagues, senior managers, leaders and organizations. According to Triandis (1980) social factors have a positive influence on the use of information technology. This shows that individuals will increase the use of information technology if they get support from other individuals.

Meanwhile, self intention is also influenced by social factors. The results of Tihai's<sup>23</sup> study revealed that social factors positively influence the intention in using

<sup>&</sup>lt;sup>18</sup> Thompson, Higgins, and Howell, "Personal Computing."

<sup>&</sup>lt;sup>19</sup> Ethik Aprilia Sumistar and Wahyu MEIRANTO, "Pengaruh Minat Pemanfaatan Sistem Informasi Dan Penggunaan Sistem Informasi Terhadap Kinerja Individu (Studi Pada PT. Samator Gas Industri)" (PhD Thesis, Universitas Diponegoro, 2011).

<sup>&</sup>lt;sup>20</sup> Thompson, Higgins, and Howell, "Personal Computing."

<sup>&</sup>lt;sup>21</sup> Gary C. Moore and Izak Benbasat, "Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation," *Information Systems Research* 2, no. 3 (1991): 192– 222

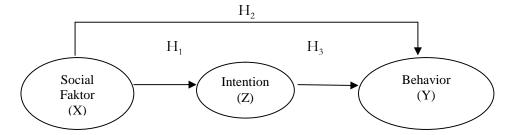
<sup>&</sup>lt;sup>22</sup> Thompson, Higgins, and Howell, "Personal Computing."

<sup>&</sup>lt;sup>23</sup> Jin, "Analisis Faktor-Faktor Yang Mempengaruhi Pemanfaatan Teknologi Informasi Dan Pengaruh Pemanfaatan Teknologi Informasi Terhadap Kinerja Akuntan Publik."

information technology. However, the research of Sumistar<sup>24</sup> actually shows the opposite results, namely the absence of influence between social factors on the interest in using information technology.

#### Research Model

The influence of each variable on student behavior in library internet utilization can be described in the model as follows:



Fiture 1. Behavior of Library Utilization of Internet Library

## Hypothesis

H<sub>1</sub>: Social factors influence intention in using the internet of library

H<sub>2</sub>: Social factors influence student behavior in utilization internet of library.

H<sub>3</sub>: Intention in influencing student behavior in utilization internet of library.

#### RESEARCH RESULTS AND DISCUSSION

## **Classical Assumptions**

The Normality Test shows that the data is normally distributed because it shows the value of Kolmogorov-Smirnov  $X=0.671;\ Z=1.416$  and Y=1.739 greater than 0.05, so the data in the regression model of this study were declared to be normally distributed. Multicollinearity test shows that all VIF values in the first regression result are variables X=1.142 and the value of Tolerance variable X=0.958 while the VIF value in the second regression result is variable  $X=1.773;\ Z=2.048$  and the Tolerance variable value  $X=0.452;\ Z=0.506$ , the regression model does not occur multicollinearity.

The results of the regression test 1 show that the influence between the social factors of the library on the intention using the internet library does not have a

<sup>&</sup>lt;sup>24</sup> Sumistar and MEIRANTO, "Pengaruh Minat Pemanfaatan Sistem Informasi Dan Penggunaan Sistem Informasi Terhadap Kinerja Individu (Studi Pada PT. Samator Gas Industri)."

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problem of heterocedasticity. This is evidenced by the points that spread randomly and spread high above and below the number 0 on the Y axis which are irregular and do not form a specific pattern, so it is concluded that this test does not occur the problem of heterocedasticity.

Based on regression test 2 shows that the influence between the social factors on student behavior in utilizing internet of library there is no problem of heterocedasticity. This is evidenced by the points that spread randomly and spread high above and below the number 0 on the Y axis which are irregular and do not form a specific pattern, so it is concluded that this test does not occur the problem of heterocedasticity.

## Hypothesis testing

Hypothesis 1 will test the influence of social factors on the intentions of utilization internet of library. Hypothesis 1 testing was done through multiple linear regression with path analysis, determinant coefficient test, F statistical test and t statistical test.

The Effect of Social Factors on the Intention Utilization Internet of Library

Table 1

R<sup>2</sup> and t Test of Social Factors on the Intention Utilization Internet of Library

Model	R <sup>2</sup> Test	t Test		
	Adjusted R	Standardized Coefficients	Sig	р
	Square	(Beta)		
Social Factors	0.352	0.028	0.001	0.05

Table 1, the number of Adjusted R Square is 0.352, meaning that 35,2 % of social factors can be explained by intention utilization internet of library variables, while the remaining 64.8 % are explained by other causes outside the research variables.

The first equation can be made to calculate the path coefficient that is by regression equation showing the hypothesized relationship.

$$Z = b_1.X + e_1$$
  
 $Z = 0.028 X + 0.419...(1)$   
\*\*\*  $e_1$ value =  $(1-0.3522)^2 = (0.648)^2 = 0.419$ 

Standardized beta coefficient of social factor 0.028 and significant (p  $\leq$ 0,05) that is 0,001 means social factors have effect on the intention utilization internet of library. For the value of standardized beta coefficient 0.028 is the path value p1.

## The Effect of Social Factors on Student Behavior in Utilization Internet Library through Intention

Table 2
R², t and F Test of Social Factors on Student Behavior in Utilization Internet Library through Intention

Model	R <sup>2</sup> Test	t Test			F Test	
	Adjusted R	Standardized	Sig	р		Sig
	Square	Coefficients (Beta)				
	0.179			0.05	3.108	0.032
Social		0.136	0.065			
Factor						
Intention		0.020	0.670			

Table 2, the Adjusted R *Square* number is 0.179 means that 17,9 % Intentions can be explained by social factors variables, while the remaining 82.1 % are explained by other causes outside the research variables.

ANOVA test or F test, the value of F arithmetic is 3.108 with significance level of 0.032. Because the probability of 0.032 is greater than 0.05 then social factors and Intention do not affect the student behavior in utilization internet library simultaneously.

Table 2, the path coefficient is calculated by making structural equation i.e regression equation showing the hypothesized relation. In this case the equation of both is:

Y = 
$$b_1 \cdot X + b_2 \cdot Z + e_2$$
  
Y = 0.136 X + 0.020 Z + 0.746....(2)  
\*\*\* $e^2$  value =  $(1 - 0.136)^2 = (0.864)^2 = 0.746$ 

Value of *standardized beta* coefficient of social factor 0.136 and Intention 0.020 with significance level respectively 0.864 and 0.670. The value of *standardized beta* coefficient 0.136 is the path value p3 and the value of *standardized beta* coefficient 0.020 is the path value p2.

Figure 2.

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Path Analysis Result of Social Factors on Student Behavior in Utilization Internet Library through Intention

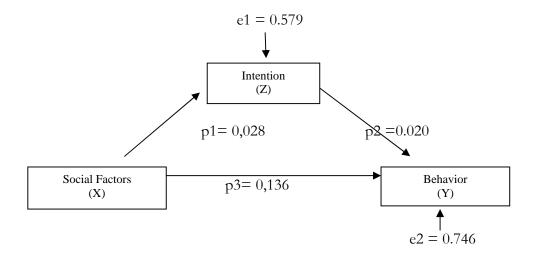


Figure 2 and table 2 show that the direct influence of social factors on intention internet of library is positive 0.136 and significant 0.065 (above 0,05), so it can be concluded that social factors do not have direct effect on student behavior in utilizing internet library. While the indirect influence among social factors on student behavior in utilization internet library through intention shows no significant influence because it is above 0.05 i.e 0.670.

Totally, the effects of social factors on student behavior in utilization internet library are:

The direct effect of social factors on student behavior in utilization internet library (p3) = 0.136

The indirect effect of social factors on student behavior in utilization internet library  $(p1 \times p2) = (0.028 \times 0.020) = 0.001$ 

Total effect of social factor correlation on student behavior in utilization internet library (p3 + (p1xp2)) = (0.136 + 0.001) = 0.137

The results of *path analysis* in hypothesis test 1 states that there is no direct effect of social factors on student behavior in utilization internet library through intention. This indirect effect is supported by empirical evidence. This is because the multiplication values of *standardized beta* p1 and p2 coefficients are smaller than the value of *standardized beta* p3 coefficient.

It is possible to explain these results, namely: (1) The model is proven not good, because if they on the comparison of Adjusted R Square value with the estimated error, is that the standard error is larger. (2) The occurrence of errors in the data structure in this research includes: (a) the possibility that there is mistake of recording or inputting data to the computer; (b) the number and characteristics of the sample are only 95 people and the characteristics of the data obtained from the questionnaire is limited, means that the data limitations to be processed make the quality lower. This is because there are some respondents who do not fill correctly, consequently the results are not in accordance with reality.

Overall it shows that social factors do not directly affect the student behavior in utilization internet library, while the intention do not have significant effect among social factors on student behavior in utilization internet library. Therefore Ha is rejected.

#### **CONCLUSION**

- a. Social factors directly do not effect on student behavior in utilization internet library by showing insignificant results
- b. Social factors indirectly do no effect on student behavior in utilization internet library through intention by showing insignificant results

#### LIMITATIONS OF RESEARCH

There are limitations in this study, namely the results of the study cannot be generalized in all universities because there are not many universities that utilize the internet library optimally so that the samples obtained are limited.

#### SUGGESTIONS FOR RESEARCH THAT WILL COME

With the limitations of the study, further research needs to add independent variables other than those already used in this study, such as : social norms, attitudes and others.

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